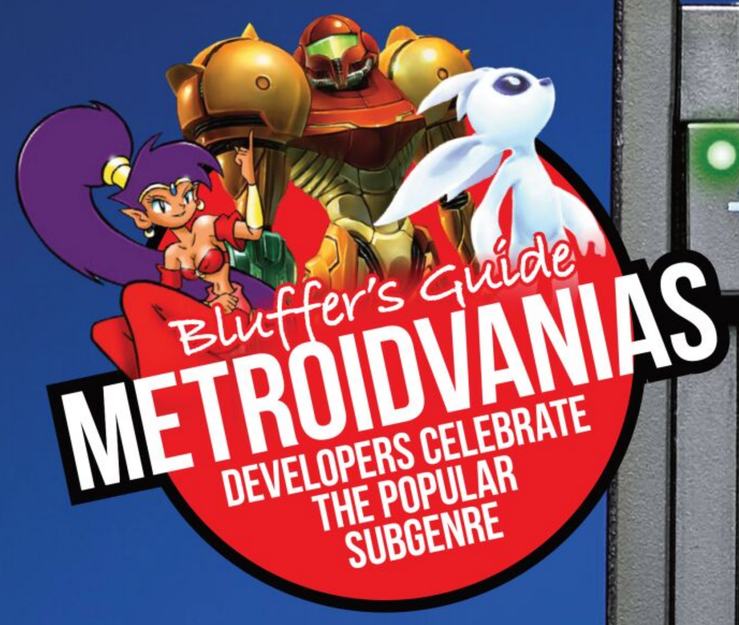
OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

retro GAMER

TIM SCHAFER: A CAREER IN GAMES
THE ACCLAIMED GAME DESIGNER REVISITS A CAVALCADE OF CLASSICS

THE EVOLUTION OF THE LAST NINJA
MARK CALE ON THE GAMES THAT SHAPED SYSTEM 3'S ISOMETRIC SERIES



Bluffer's Guide
METROIDVANIAS
DEVELOPERS CELEBRATE THE POPULAR SUBGENRE

> THE GENERATIONAL ADVANCE FROM PS1 TO PS2 WAS THE GREATEST I'VE EXPERIENCED
> MARK CERNY

PS2

HOW SONY'S SECOND CONSOLE BECAME THE BEST-SELLING OF ALL TIME

IN THE CHAIR
BETTY RYAN
A RARE INTERVIEW WITH THE GCC AND ATARI TRAILBLAZER

ULTIMATE GUIDE
MANIC MINER
WE EXAMINE EVERY FACET OF MATTHEW SMITH'S LEGENDARY GAME

THE MAKING OF
PROJECT ZERO 1-3
MAKOTO SHIBATA REVISITS HIS SPINE-TINGLING HORROR SERIES

ALSO INSIDE

MISSILE COMMAND

WONDERFUL DIZZY

THE LAST EXPRESS

SPYRO: YEAR OF THE DRAGON

EARTH DEFENCE FORCE 2017

RAMBO III

RETROMANIA WRESTLING

FUTURE
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PlayStation

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THE PERFECT GIFT, EVERY TIME

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LOADING...

Will we ever have a home console as popular as the PS2? Sony's second console was a phenomenal success for the company, building on the momentum the Japanese giant had created with the original PlayStation, and utterly annihilating the competition in the process. Put the sales of the Dreamcast, Xbox and GameCube together and they still can't make a dent in the impressive sales figures of the PS2.

Regardless of whether you felt the 'Emotion Engine' lived up to the promised Sony hype, there was no denying Sony's commitment to the console, the wealth of available games (over 4,400) and its many excellent exclusives. For this issue we decided to speak to many luminaries within the industry, including the likes of David Reeves and Mark Cerny to find out just what made Sony's second console so very special.

Other highlights of our first issue of 2021 include in-depth features on *Manic Miner*, *The Last Ninja*, Metroidvanias, Tim Schafer and the first three *Project Zero* games, as well as plenty of smaller features as well. Thanks again for all the support you showed us in 2020 and don't forget to take advantage of our new subs offer on page 28 if you haven't already done so. It really helps.

Stay safe and enjoy the magazine!

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HOW SONY'S SECOND CONSOLE BECAME THE BEST-SELLING OF ALL TIME
METROIDVANIAS
PROJECT ZERO 1-3
THE GENERATIONAL ADVANCE FROM PS1 TO PS2 WAS THE GREATEST I'VE EXPERIENCED
PlayStation.2

THE RETROBATES

WHAT'S YOUR FAVOURITE PS2 GAME?

DARRAN JONES

Sega's *Rez*. Yes it's not an exclusive, but it's a big improvement over the Dreamcast version and I still love playing it today.

Expertise: Juggling a gorgeous wife, two beautiful girls, a SNES-loving cousin and an award-winning magazine, all under one roof!

Currently playing: *The Witcher III: Wild Hunt* (ta Secret Santa!)

Favourite game of all time: *Strider*

TIM EMPEY

God Hand. Incredibly divisive reviews aside, I love this damn game so much I completed it on hard mode, twice. Then I took a pic of the save screen and used it as my Facebook header image just to prove how unbelievably hardcore I am.

Expertise: Completing Game Pass games before they leave the service.

Currently playing: *Fallout 76*

Favourite game of all time: *Street Fighter III: Third Strike*

NICK THORPE

I've got 115 PS2 games and you expect me to pick one? Madness. I'm drawn to the platform's offbeat offerings, and few games exemplify oddball creativity like *Katamari Damacy*, so let's go with that before I overthink it.

Expertise: Owning five Master Systems and a Mark III

Currently playing: Astro City Mini

Favourite game of all time: *Sonic The Hedgehog*

ANDY SALTER

GTA III, it was the game that set the PS2 apart from the other consoles of the time. PS2 owners got ports of some great PC games, but this was all theirs.

Expertise: Modding games, no 'vanilla' versions for me, thanks!

Currently playing: *STALKER: Anomaly*

Favourite game of all time: *Rome: Total War*

PAUL ROSE

Jak And Daxter: The Precursor Legacy. Naughty Dog foreshadowing the greatness that would soon become apparent to everyone.

Expertise: Winging it

Currently playing: *Cyberpunk 2077*. Or trying to…

Favourite game of all time: *Half-Life 2*

HARETH AL BUSTANI

Way Of The Samurai. Asides from being obsessed with Japanese history, the branching storyline, deep combat system, and overall charm make this the one for me.

Expertise: Juggling obscure games, words and guitar, and seeing where it all lands

Currently playing: *Crusader Kings III*

Favourite game of all time: *The Secret Of Monkey Island*

PAUL WALKER-EMIG

Pro Evolution Soccer 6. That's thanks to the PS2 primarily being a communal console at that time in my life and countless hours spent going back and forth in long-standing rivalries with friends.

Expertise: Professional Gabriel Knight lookalike

Currently playing: *Cyberpunk 2077*

Favourite game of all time: *Metal Gear Solid*

DAVID CROOKES

Being able to explore an entire state in Grand Theft Auto: San Andreas was a mind-blowing leap forward for this criminal fantasy sim.

Expertise: Amstrad, Lynx, adventures, *Dizzy* and PlayStation 2 (but is it retro? Debate!)

Currently playing: *BMX Simulator*

Favourite game of all time: *Broken Sword*

IAIN LEE

I would say *Burnout 3 Takedown*. I was obsessed with the mode where you competed to cause the most damage in one crash.

Expertise: Buying overpriced stuff on eBay then never touching it

Currently playing: Death runs on *Fortnite* with me kids. I am awful at them

Favourite game of all time: *Elite* (BBC Model B)

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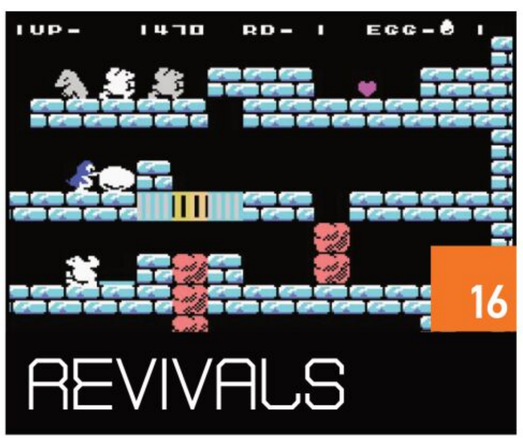

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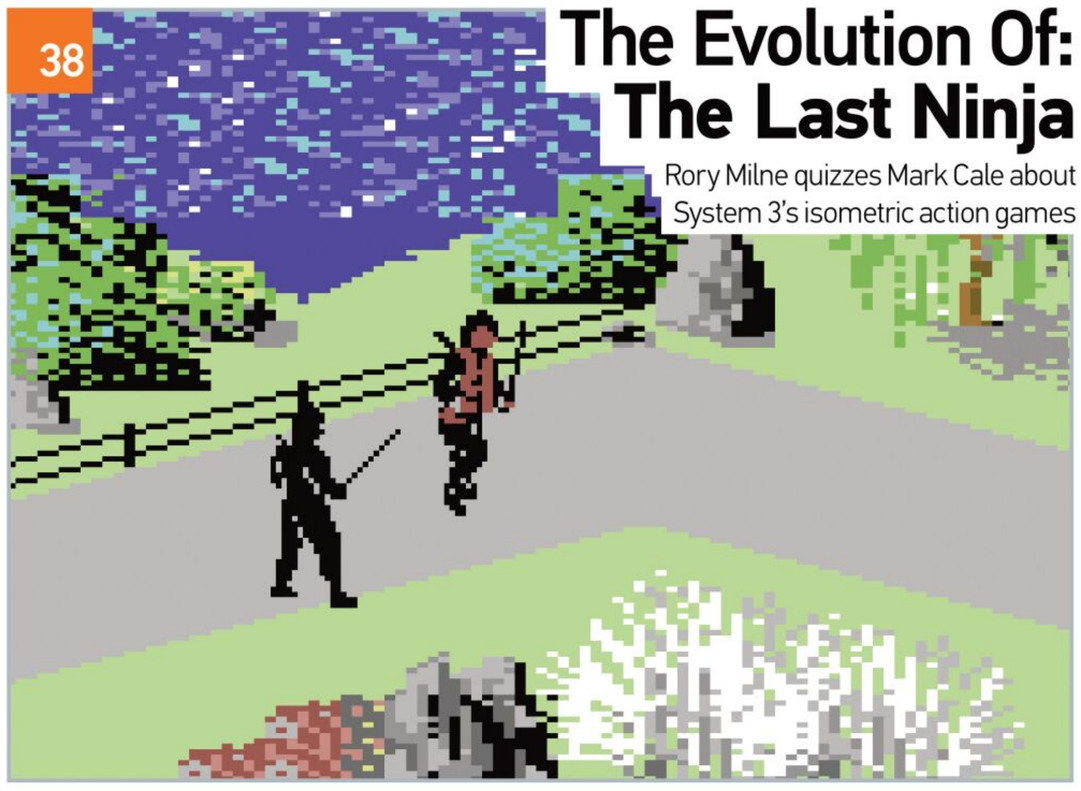

The Evolution Of: The Last Ninja
Rory Milne quizzes Mark Cale about System 3's isometric action games

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Ultimate Guide: Manic Miner

It's rather astonishing that we've never given this Spectrum classic the Ultimate Guide treatment

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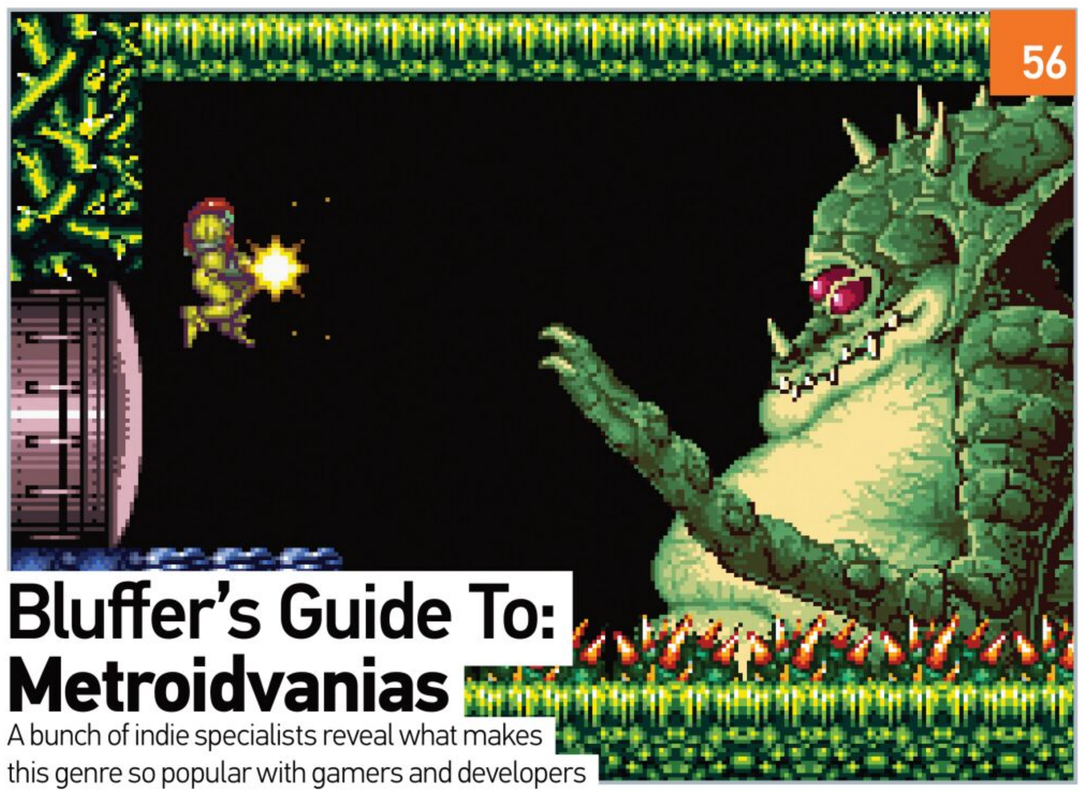
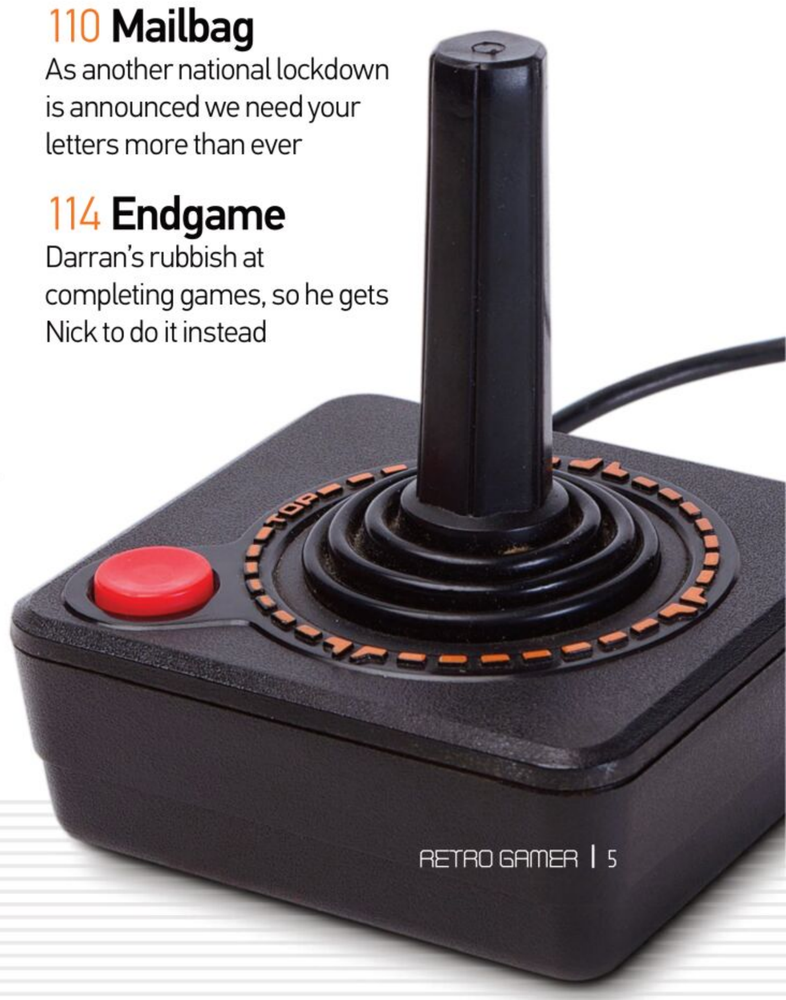
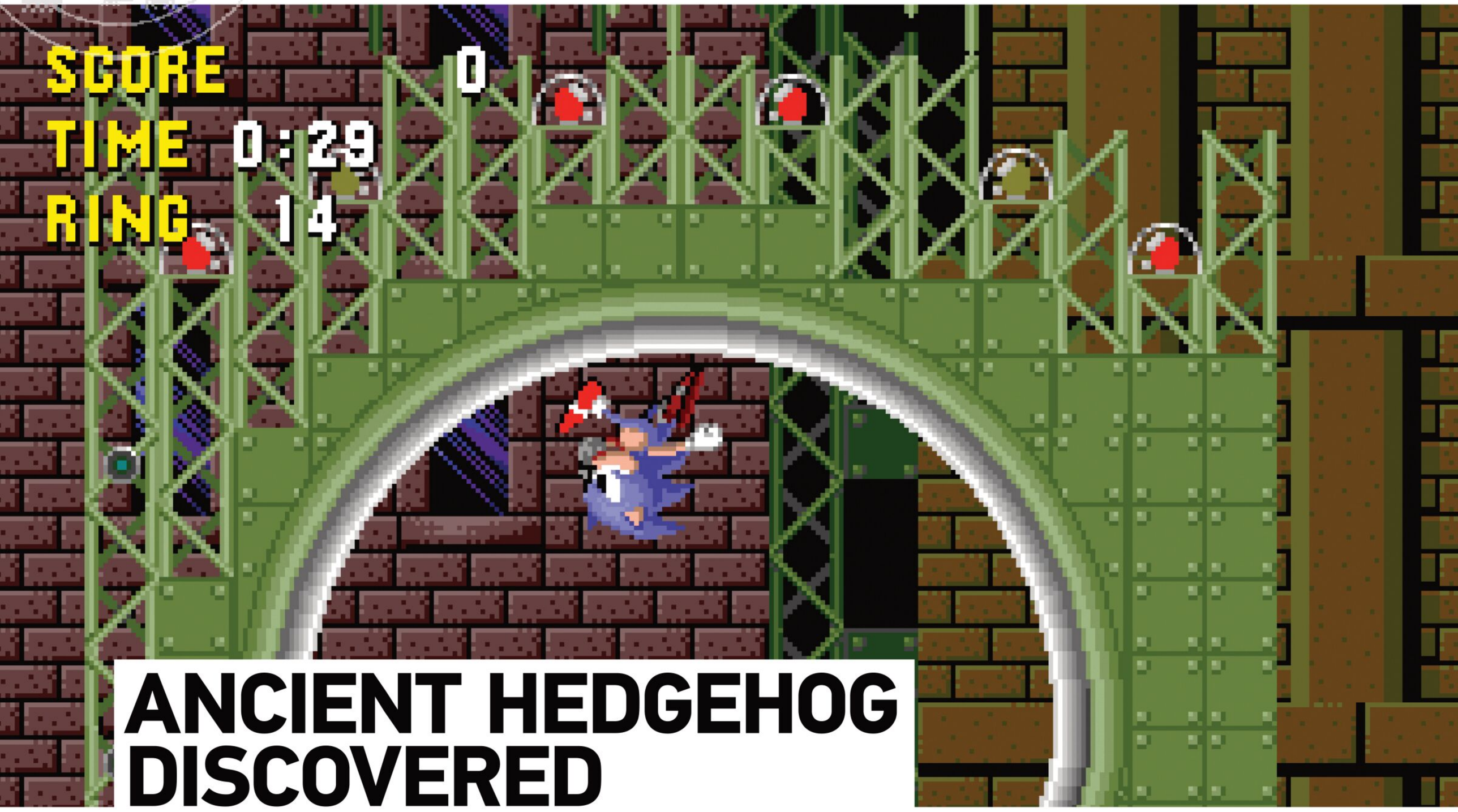


Bluffer's Guide To: Metroidvanias

A bunch of indie specialists reveal what makes this genre so popular with gamers and developers





ANCIENT HEDGEHOG DISCOVERED

Long-lost prototype of Sonic's first outing found

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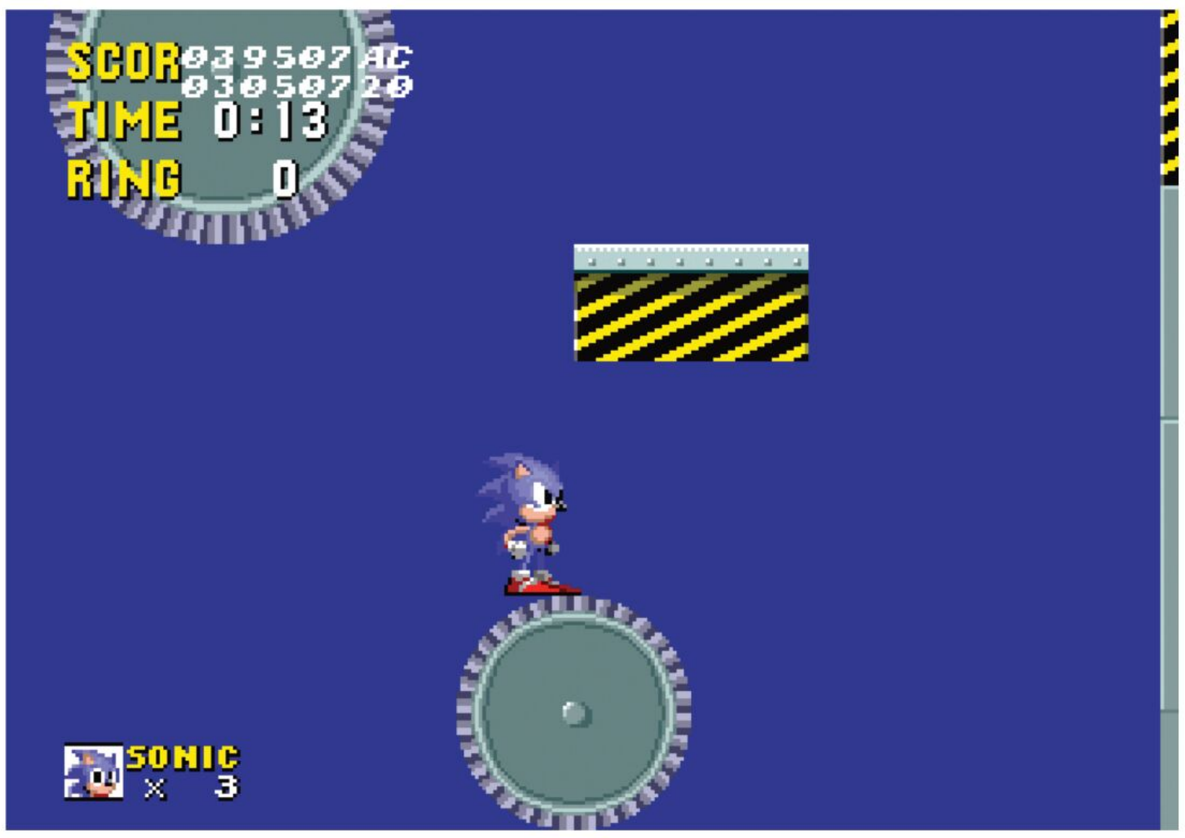
Prototypes of videogames can be fantastic resources for learning about how games were developed, showing unfinished and unrefined content that can't be found in the final game, but they're never easy to find. So you can imagine our complete surprise when reader Buckaroo emailed us out of the blue with images appearing to show a prototype of one of gaming's biggest hits – *Sonic The Hedgehog*.

"I'm a retro game collector so I am buying bundles of games all of the time. By sheer fluke this cartridge was in a bundle I purchased which only contained standard release games," says Buckaroo. "The weight of the cartridge was way heavier than any other Mega Drive game I've had. On the back it had two standard screws so I assumed it was a bootleg. I opened it up and saw four EPROMS and instantly knew this was something different. There was no Sega logo on the PCB so I still assumed this was a very old bootleg." He quickly began to play the game, initially disappointed that it wasn't the *Sonic Crackers* prototype as an online search had led him to believe. "I started running through the first level which seemed familiar when I ran into this ball that looked like a brown version of the Amiga boing ball. I pushed the ball around a bit and then it squashed me and knocked me through the map."

At this point, Buckaroo had to look elsewhere for advice. "I've got a mate who loves the *Sonic* games, he grew up in Hong Kong so is familiar with the bootlegs and has continued to play various ROM hacks and lost versions over the years. I video-called him and he looked baffled when he saw the ball. 'You've got something special there,' he replied and I carried on searching." Then he made a discovery on The Cutting Room Floor (tcrf.net), a disused content wiki. "From the descriptions of the screenshots, it was clear that at least the person who made this page hadn't played the game. Like, why hadn't they mentioned that there's no water in the Labyrinth? I couldn't be certain of what I had as the versions were subtly different so I posted that I had found this on their IRC page and Discord. There were mixed reactions from jubilation to disbelief."

» Here's the PCB containing the prototype game, as found by Buckaroo. The cartridge had a plain, photocopied label.

Suddenly finding himself bombarded with messages, Buckaroo was contacted by drx – best known online for Hidden Palace (hiddenpalace.org), a website dedicated to tracking down and preserving prototype versions of games. "I have a ton of experience with Sega prototypes, so someone asked me to check it out. I spoke to the owner and he was kind enough to share some screenshots and a video," drx tells us. After seeing photos of the cartridge and a video demonstration, he was extremely hopeful. "It seemed genuine, but the only way to truly verify it is to have a look at the ROM itself. I sent the owner a Retrode, which can be used to back



» [Mega Drive] Scrap Brain Zone – or Clock Work Zone, back then – has no background and a broken layout.

» [Mega Drive] Labyrinth Zone feels eerie with a cavernous background, and a total lack of objects and water.

» [Mega Drive] Most of the game's bosses aren't yet implemented, so Marble Zone ends with a standard spinning post.

» [Mega Drive] At this point Spring Yard Zone was known as Sparkling Zone and had a very different background.

up the contents of a cartridge. These prototypes are often one of a kind, and if they are not backed up, the data can be lost forever."

What makes this one particularly special is the status it holds within the *Sonic* fan community. "Finding a prototype of the first *Sonic* game eluded us for a long time. By contrast, we have found at least ten different prototypes of *Sonic 2*. Presumably because after the success of *Sonic 1*, the second game was marketed heavily and quite popular. Various people over the years have kept copies, which have ended up in our hands eventually," drx explains. "But the first *Sonic* game was relatively unknown at the time, making it less likely for prototypes to still exist."

Of course, drx still needed to verify that it was actually a real prototype. "I opened up the ROM in a disassembler and looked through the assembly code itself, which confirmed the authenticity," drx explains. "This can be likened to verifying a painting. First you look for obvious signs of forgery from photos (screenshots) of the painting. If there are no obvious signs of forgery, you might analyse the frame (cartridge) and the materials (circuit board), and verify that it was made decades or centuries ago. Then you might look at the painting under a microscope (hex editor) or scan it with x-rays (disassemble the code) to reveal the minute details and its hidden history."

Research is now taking place to determine what secrets this decidedly unfinished version holds. "The first level, Green Hill Zone, is the only relatively complete one, and the only one to have a boss. The other levels range from incomplete, to completely broken and missing any objects or even backgrounds," drx tells us. "There are many hidden things inside the ROM that are left over from even earlier versions of the game, such as test level layouts, a night palette for Green Hill Zone, and an early debug mode that shows up in some of the earliest preview screenshots of the time." And what will Buckaroo do with this unique find? "I've had so much fun playing this version and have been blessed to have been a part of this story but the cartridge doesn't fit my collection in any way," he tells us. "I'm looking to auction this on eBay during February 2021." To those with sufficiently deep pockets, we wish you the best of luck. *

Special thanks to Revival Games, Plymouth, for support with this news story.

PREVIOUS PROTOTYPES

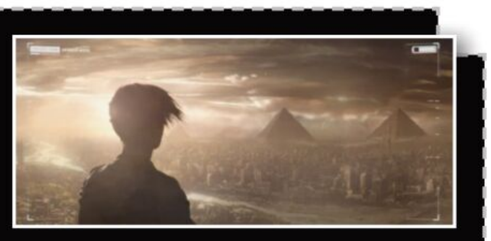
What have we learned from prototypes of other Sonic games?

SONIC THE HEDGEHOG 2

The chaotic development of *Sonic*'s sequel meant that plenty of ideas didn't make the final cut. Across various prototypes it's possible to see scrapped zone concepts such as Wood Zone and Hidden Palace Zone, as well as a variety of lost enemies including some based on dinosaurs. Most curiously, at one point the developers had considered adding a mechanic where Sonic could be stunned if he ran into a wall too fast. We can't imagine that having gone down very well.

SONIC 3

This prototype comes from a point at which content was beginning to be moved to *Sonic & Knuckles*, and features zones that would only appear in that game. Early music tracks for three zones correspond not to the final game, but to tunes used in the PC release of *Sonic 3 & Knuckles Collection*. Early sprites for Knuckles were also found, and an early 'helper' mechanic is evident that would have seen Tails intervene if the player chose to play as Sonic alone.



OUT OF THE DARKNESS

Perfect Dark is set to return to the gaming scene, as the first game developed by Microsoft's new Santa Monica-based studio The Initiative. The new game appears to be a franchise reboot, taking place in an environmentally disastrous near future in which shadowy corporations offer salvation from the floods, storms and fires that have devastated Earth. The game is coming to Xbox platforms, but beyond that little is known about the new FPS – no release date has been announced, nor any potential involvement from the original developer Rare, itself a Microsoft studio. We'll bring you more details as they emerge.

BITTER LEMONS

Popular Commodore community sites Lemon Amiga and Lemon 64 suffered a server breach in December, with the attacker gaining root access to the servers. "It's nothing but tragic that hackers target hobby projects like this," said the site owners in a statement. "There is no money in this and there is really no pride in hacking 15+ year old server software. The only thing this causes is stress and sadness among administrators and our users." Users with forum accounts on the sites should change their passwords on both sites, as well as any other sites where those passwords may have been used.

» The Lemon sites are an invaluable Commodore community resource and we wish the team well.

CAPCOM CLASSICS SWITCHED UP

NINTENDO BENEFITS FROM BACK CATALOGUE GOODIES

Capcom has announced a couple of interesting projects for Nintendo Switch owners, with the first being Capcom Arcade Stadium. This digital only release offers a range of 32 arcade favourites from 1984 to 2001, with *1943: The Battle Of Midway* being available for free. Further games are available in bundles of ten, grouped by age. Among them are the likes of *Commando*, *Forgotten Worlds*, *Strider*, *Final Fight*, *Super Street Fighter II Turbo* and *Giga Wing*. *Ghosts 'N Goblins* will also be available as an individual release to round out the package.

Speaking of *Ghosts 'N Goblins*, poor old Sir Arthur just won't stay dead no matter how many times he's killed, and so it is that he's getting ready to make his first appearance in a new console game since *Ultimate Ghosts 'N Goblins* in 2006. *Ghosts 'N Goblins Resurrection* is a 2D run-and-gun game in the style of Capcom's classics from the Eighties and Nineties, with brand new HD visuals and callbacks to past enemies and stages. From the footage we've seen so far, the new game looks to retain the fiercely challenging stage design that made the series famous. *Capcom Arcade Stadium* and *Ghosts 'N Goblins Resurrection* are both scheduled for February 2021.

» How many of the 32 games in *Capcom Arcade Stadium* can you recognise from this promotional art?

» [Switch] We're looking forward to doing battle with some of Sir Arthur's old foes again.

» [Xbox One] Codemasters most recently released *Dirt 5*, a fun if slightly flawed arcade rally racer.

COURTING CODIES

RIVAL PUBLISHERS BID TO TAKE OVER CODEMASTERS

Codemasters looks set to be purchased in a massive £1 billion deal that would see the company become a subsidiary of US publisher Electronic Arts. The surprise move came after Codemasters had recommended that its shareholders accept an earlier £714 million bid from Take Two, owners of the 2K Games and Rockstar publishing labels.

Warwickshire-based Codemasters was founded by Richard and David Darling in 1986, and initially built its reputation with budget software for 8-bit home computers, including the popular *Dizzy* series. The company would diversify into the console market in the Nineties, publishing series such as *Micro Machines*, *Brian Lara Cricket* and *Colin McRae Rally*, and in the last decade it has predominantly focused on driving games. EA's acquisition of Codemasters is expected to be completed in March 2021, bolstering its own racing offerings such as the *Need For Speed* games with the *Dirt* and *F1* motorsports series.

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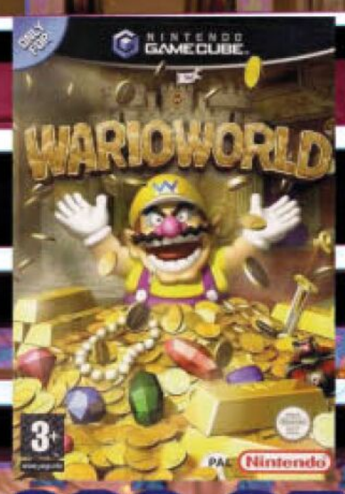

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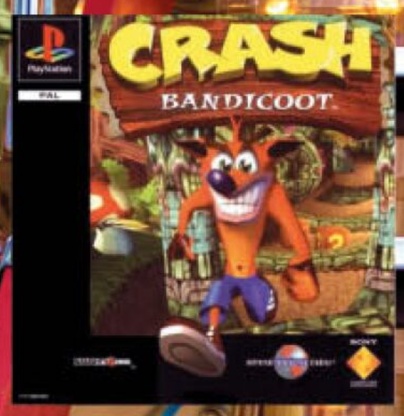

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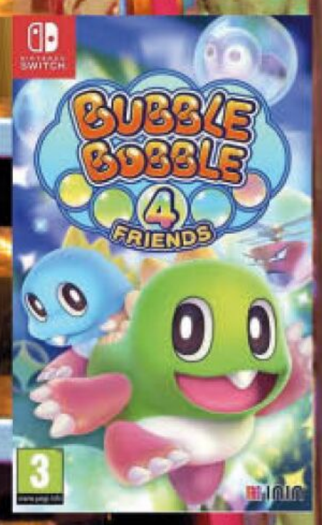

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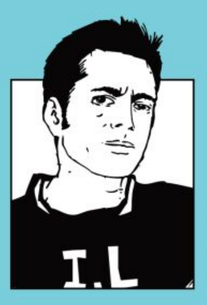
Who is Iain Lee?
Iain Lee is a freelance broadcaster who loves gaming, particularly retro gaming. Join him as he hosts a phone-in show and plays games at www.twitch.tv/iainlee and also check out www.patreon.com/iainlee.

Is There Anybody Out There?



I was weird as a kid. From a very young age I was turned on by two words. Acoustic coupler. Wow, even typing it gives me a thrill. For those who don't know, the acoustic coupler was a device to get on to the internet before we had the internet. It was a big old block with two rubbery attachments on either end. These were where you stuck the handset of your rotary phone so it could communicate with Prestel. Ooh, Prestel, another very sexy word.

I probably first saw this weird device on *Micro Live*, I have a vague memory of Fred Harris using them. Ever since that moment I was obsessed. Every time I got a computer mag I skipped straight to the ads for modems and acoustic couplers. I constantly begged my mum for one although there was absolutely zero chance of getting one. Firstly, because they were so expensive and secondly the phone bills would have been horrendous. We didn't have a lock on our phone like some families, but if you ever wanted to make a call you had to withstand an intense interrogation before permission was usually denied.

Why did I want this technological brick? I don't really know. I can't remember what you could do online back in the Eighties. It looked like Ceefax, and there was a bulletin board but... what the hell is a bulletin board? I don't think there were games, there certainly weren't cat videos. There were no videos at all. There was just something magical about it, the idea of being able to reach outside of your house with a humble BBC Micro seemed so incredible that I wanted a piece of that pie.

I was a lonely kid and computers and games were my friends. That may sound a little sad, and I did have flesh and blood pals as well, but there were intense periods of loneliness that were lifted by being able to play *Frak!* or *Strykers Run 2*. They took me to another world and I guess the idea of being able to actually travel the real world from the safety of my bedroom was appealing to the loner in me. I don't think I was full hikikomori, a modern day digital hermit, but I liked to keep my distance from people and bulletin boards seemed a way of doing that.

Speaking of *Micro Live*, why on earth haven't the BBC released a full set of it on VHS (I'd say Betamax, but I realise I lost that battle) for us proper retro heads? It's easy to overlook just how pivotal that show was for normalising computers and games and, well, geeks. Our parents took the whole thing a lot more seriously because some old dude was on the BBC saying it was OK to be into computers. Ian McNaught-Davis was an odd hero to a bunch of ten year olds, but he was an absolute legend and I don't know anyone in their late 40s who doesn't respect him and what he did for us all. *

> "I begged my mum for one although there was absolutely zero chance of getting one"

Do you agree with Iain's thoughts? Contact us at:

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Bank Sort Code: ☐☐-☐☐-☐☐ Account Number: ☐☐☐☐☐☐☐☐

Instructions to your Bank or Building Society: Please pay Centrepoint Direct Debits from the account detailed in this instruction, subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with Centrepoint and, if so, details will be passed electronically to my Bank/Building Society.

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Your donation will go towards funding Centrepoint's vital work with young people all year round providing accommodation and support. We sometimes use models and change the names of the young people we work with to protect their identity; however all stories are true and as told by the young person.

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Thank you for donating to Centrepoint today.

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Last year our supporters helped us change the lives of over 15,000 homeless young people. By letting us know we can count on you, we can continue helping young people with a home and a future.

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We promise never to sell or swap your details, and will always keep them secure. You can view our Privacy Notice in full at www.centrepoint.org.uk/privacy. You can opt out of post and change how we communicate with you at any time. Please call 0800 232320 and speak to one of our friendly team or email supportercare@centrepoint.org to do this and ask us any questions.

Please return this form to: Freepost Plus RTXY-LBEA-UTJJ, Angel Fulfilment Services Ltd, Communication Centre, Par Moor Road, Par PL24 2SQ.

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centre point give homeless young people a future

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Who is Paul Rose?
Paul is probably better known as Mr Biffo – the creator of legendary teletext games magazine *Digitiser*. These days, he mostly writes his videogame ramblings over at Digitiser2000.com. If you want more Biffo in your eyes, you can catch him as the host of *Digitizer The Show* at www.bit.ly/biffo2000.

Crossing The Streams

I had a nightmare of a Sunday last week. Long story short, a pipe underneath our boiler sprung a leak. Unfortunately, it happened to be the mains water pipe. Doubly unfortunately, after two different plumbers came out, and after our driveway was partially dug up, the leak remained. I attempted to fix the leak myself, which – inevitably, somewhat, given I once put an axe through the living room ceiling while attempting to widen a doorway – resulted in the pipe snapping entirely and flooding most of our back room.

Cue another call to an emergency plumber. Who happened to be called… wait for it… Mario. I mean, you couldn't make it up. He was called Mario! Literally! A plumber called Mario! And, yes, he did manage to stop the leak. And no, I didn't work up the courage to shout 'Wa-hoo!'. And no, he didn't turn up on a dinosaur or little go-kart thing. It was one of the more overt examples I've experienced of gaming crossing over into the real world, but they seem to happen a lot.

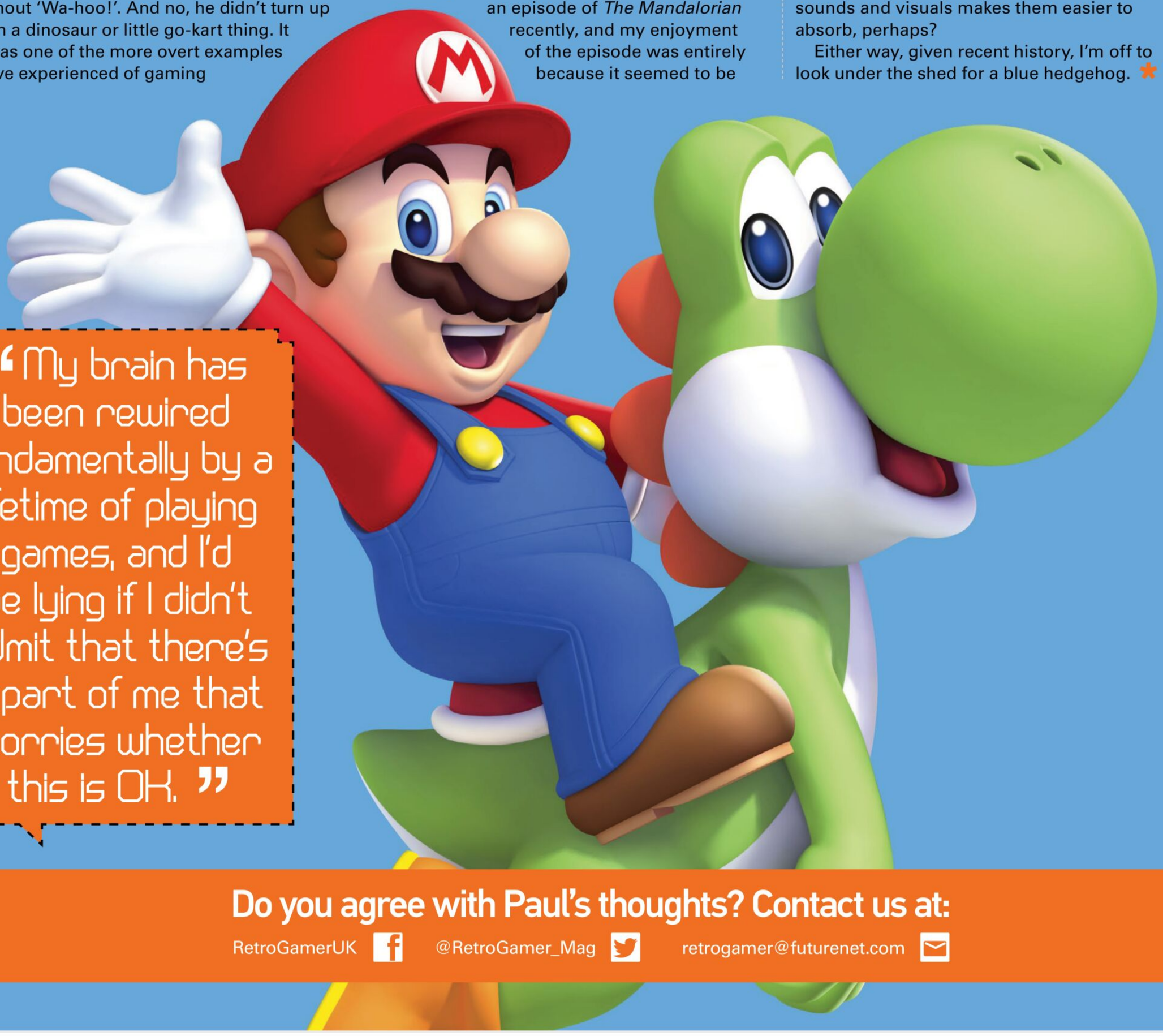
The other day, my wedding ring came off in the shower, and as it spun across the enamel, I thought '*Sonic*'. On more than one occasion, I have been on the motorway and thought 'these are great graphics', before catching myself. Even when the drive was being dug up, I peered into the hole left by the removed bricks, and my first thought was '*Tetris*'.

My brain has been rewired fundamentally by a lifetime of playing games, and I'd be lying if I didn't admit that there's a part of me that worries whether this is OK. The first time I remember it happening was closing my eyes at night and seeing the alien invaders from my Tomy *Astro Wars* game. I've been in work meetings and felt my fingers dancing across a desktop, twitching out a puzzle game rhythm. I was even watching an episode of *The Mandalorian* recently, and my enjoyment of the episode was entirely because it seemed to be harkening back to *Dark Forces* (the high benchmark of all *Star Wars* games, and if you disagree I'll happily chop you in half, and boot you down a ventilation shaft).

Is… that OK? Not the threat of violence; I mean, is it OK for games to do this to our brains. I've never experienced any other medium to spill over into my real-world perception in the way that games have done. Not music, not movies, not books. Games, perhaps because we're interfacing with them – we interact with them – offers much more of a link to our brains. At the risk of disappearing up myself, we become one with them.

And it's perhaps telling that simpler – and, let's face it, older – games are the ones which have affected me most profoundly. Perhaps it's the relative repetition of classic gameplay which baked them into me in this way. The more streamlined, more iconic, characters, sounds and visuals makes them easier to absorb, perhaps?

Either way, given recent history, I'm off to look under the shed for a blue hedgehog. *



> "My brain has been rewired fundamentally by a lifetime of playing games, and I'd be lying if I didn't admit that there's a part of me that worries whether this is OK."

Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

What's next for Evercade?

Andrew Byatt on Blaze's early 2021 plans for its popular handheld

One of our favourite console releases of last year, wasn't by either Microsoft or Sony, but by Blaze Entertainment. Despite a few niggling teething issues (which are admittedly being fixed with regular updates) the Evercade has still managed to become an essential piece of kit, impressing us with its low entry point, strong developer support and a cracking array of games, from stone cold classics, to obscure curios. With several new packs planned for April, it felt like the perfect time to catch up with Blaze's managing director, Andrew Byatt.

Have you been surprised by the Evercade's reception?
We have been incredibly thankful for the reception to Evercade, from both the media as well as consumers. We worked incredibly hard on it and continue to. It was tough to launch a console in the middle of a pandemic, but we did it and can now look to the future.

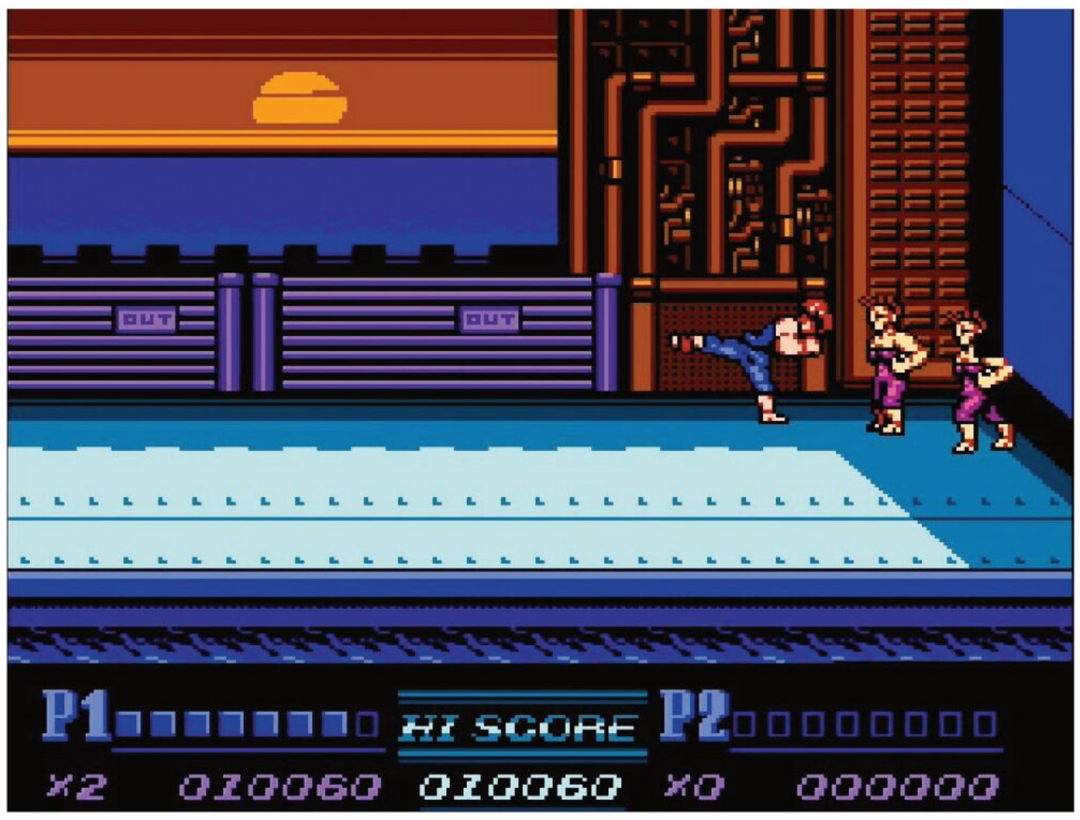
You've added several firmware updates since launch. How important has it been to respond to customer feedback?
Responding to customer feedback is vital to the longevity of this project and it is something we will continue to maintain. We just recently put out firmware 1.3, which introduces a whole host of new features and we are already working on future updates. We want to set ourselves apart from other companies in this space and be there when people need us. We welcome people to join our social channels like Discord, our Facebook group and Twitter to talk to the team.

Speaking of expectations, when can we expect to see a native 1:1 pixel aspect ratio option?
This is something we have on the development roadmap for 2021. We have always tried to keep options very simple. Just put the cart in and go, but we recognise that some features should be added to enhance the experience.

» Evercade got off to a great start due to a bunch of recognisable IPs, from *Pac-Man* to *Earthworm Jim*.

Your *Worms* and *Piko 2* collections feature a PlayStation release. Is emulation beyond the 32-bit consoles possible?
Since launch we now have a dedicated and talented team who are working flat out to get as much as we can out of the hardware. Whilst 32-bit – PlayStation, Game Boy Advance – is currently our top tier of emulation at the moment for the handheld, we are also working on direct native-based ports of old and new titles which will certainly push the hardware to the limits.

With regards to the *Worms Collection* why does it only feature three games? Is it licensing costs?
We felt that these three titles represented real value. We are excited to get more 32-bit content on the system and have such an enduring franchise. We showed with *Xenocrisis* and *Tanglewood* that sticking to ten or twenty games is not always necessary when the value is there.



» [Evercade] Early games like *Double Dragon 2* suffered from reversed controls, but this was quickly fixed by the team.

What are your plans for 2021?
More carts and some exciting hardware developments.

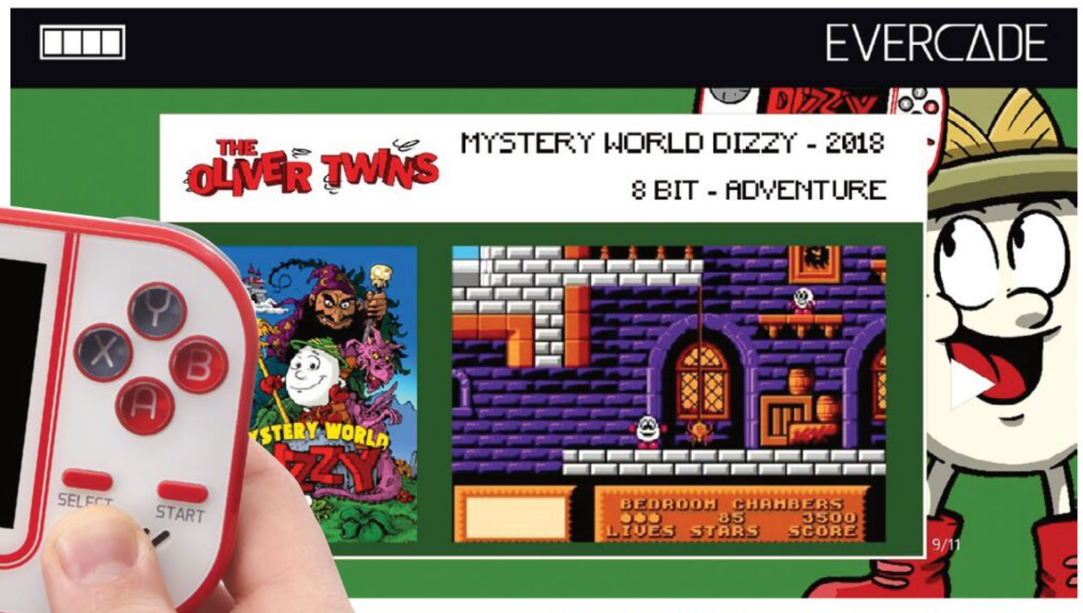
Considering how prolific they are elsewhere, how long before we can expect Sega, SNK and Konami releases on Evercade?
We obviously can't discuss our ongoing licensing discussions, due to NDAs. However, outside of licensing discussions, we would obviously love to have all three of those on the platform.

Your next release is April. Is it wise to have such a big gap in your schedule?
Our focus has always been on quality over quantity. We are focused on releasing carts people want and that they will look forward to. We will have a quiet start to 2021, however, from then onwards we will have some very exciting things to release!

How far away are we from the promised arcade ports?
We are working on this area and will have these in 2021 for sure.

Can we expect the hinted at Evercade home system in 2021?
I can neither confirm of deny such details [smiles]. ✱

» We're big fans of Blaze's console and it has some great games across its 14 cartridges.



» [Evercade] Recent releases improved the presentation, making backgrounds a little more interesting to look at.

» Just as we were going to press Blaze announced a Codemasters collection, which will also feature a few Sensible Software gems.

BACK TO THE NOUGHTIES

MARCH 2004 – Nintendo announces a new console and nobody's sure what to make of it, Sonic's mates slow him down and EA takes us back to Vietnam. Once again, Nick Thorpe braves the past to bring you yesterday's hottest news, today!

[PS2] James Bond knocked Sonic off the top spot, despite also not being in a spectacularly good game.

NEWS MARCH 2004

193 people were killed in a series of coordinated bombings in Madrid, Spain, on 11 March. The attacks targeted the city's train system during rush hour, with ten explosions on four trains in under five minutes. This attack came just three days before Spain's general election, and was widely perceived as having affected the result. The ruling People's Party had claimed that the Basque separatist group ETA was responsible for the bombings, but the wider population had suspected it to be an Islamist terrorist attack brought about by the nation's involvement in Iraq. A total of 21 people were convicted of involvement in the bombings in 2007, with sentences ranging from three to 42,924 years in prison.

On 20 March, the BBC announced that Christopher Eccleston would portray The Doctor in its revival of *Doctor Who*, scheduled to be filmed later in 2004 for transmission in 2005. The broadcaster claimed that the casting would deliver a "fresh, modern approach", which would be "surprising, edgy and eccentric".

Ireland became the first country in the world to ban smoking in all enclosed workplaces on 29 March, in a bid to protect the general public from the effects of second-hand smoke. Anyone smoking in a restricted location could be given a €3,000 fine – a move that many in restaurants, pubs and clubs felt would be unenforceable. By 2008, a Eurobarometer poll suggested wide acceptance of the measures, with over 70% of respondents in favour.

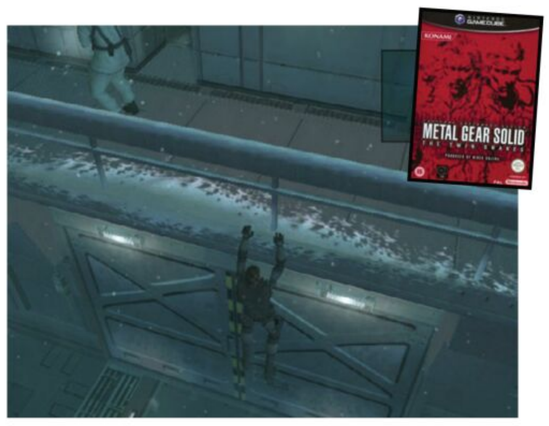
THE LATEST NEWS FROM MARCH 2004

Less than three years after the introduction of its wildly popular Game Boy Advance, Nintendo surprised developers, press and players alike by announcing the Nintendo DS – a handheld console with a dual-screen display. Nintendo envisaged this not as a successor to any existing hardware, but as a "third pillar" in its console strategy. While no images or software announcements accompanied this press release, people were ready to have their say. Vicarious Visions' CEO Karthik Bala told *Edge* that it was "too early to make a call on whether DS is going to be successful", but that strong launch software was needed, "which is going to be tough since most publishers and developers have their 2004 slate figured out". *NGC*'s typical excitement was tempered, worrying that "games will end up being nothing more than RPGs with real-time map screens", and cautioning that "as Nintendo themselves put it, they're not expecting everyone to 'go wild' at its unveiling".

Reviews came in for *Sonic Heroes*, the team-based successor to the *Sonic Adventure* games, and they painted the picture of an underwhelming multiplatform debut. *Edge* scored it 5/10, claiming that "the best bits are when you find that the majority of control has been taken away from you" and that the three-character formation model "isn't really teamwork". *NGC* proclaimed that it both "isn't awful" and was also "woefully inadequate" on the same page, scoring the game 65% while criticising "irritating controls", poor camera work and a lack of challenge. *GamesMaster* was the most positive, scoring the game 78% for "funky colours and the good kind of chaos" but noting "a serious dose of unfair death syndrome" and "chummy childishness" as issues dragging it down.

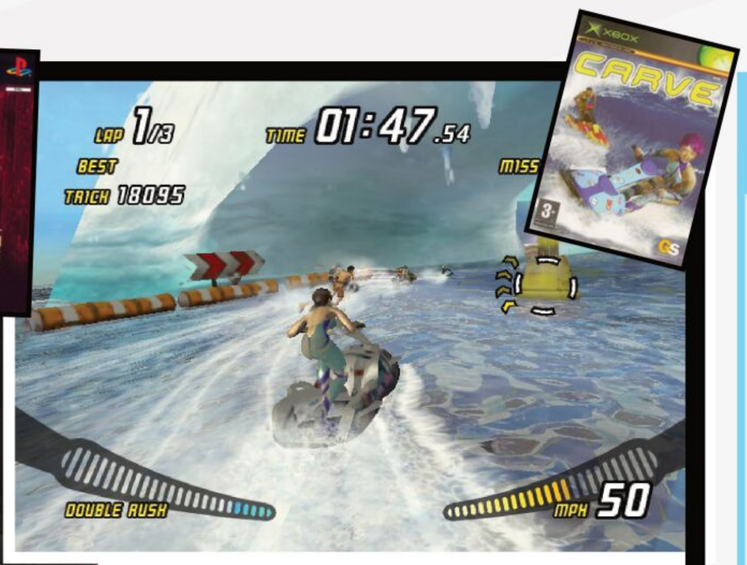
Speaking of chart hits, *James Bond 007: Everything Or Nothing* was flying off the shelves despite mediocre reviews. "The evident hard work, glossy visuals and strength of the Bond IP alone make you want to love it, but the love affair will last until about the second mission", said *Edge*, which scored the game 5/10. The reviewer felt the lock-on shooting to be poorly implemented and the driving to be "dogged by clockwork events and poor signposting", while the signature Bond Moment mechanic was said to produce "clichéd and pointless" moments. *NGC* felt similarly, giving a 68% score and complaining that you

[GameCube] *Sonic Heroes* was still being picked up by eager gamers, despite being rather less than great.

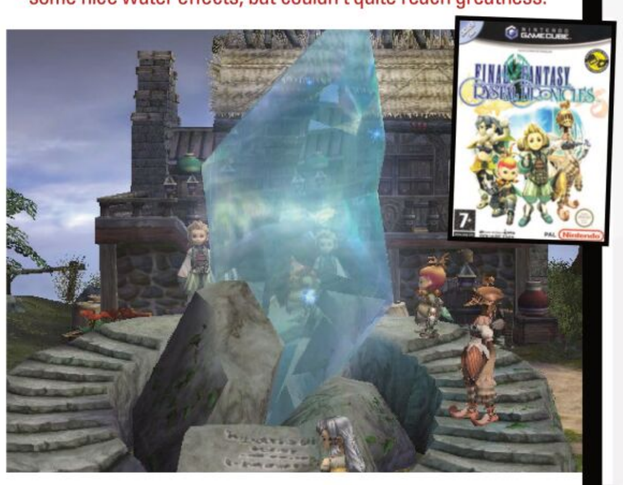


[GameCube] *Metal Gear Solid*'s remake took game of the month honours, but then the original was amazing.

[PS2] Noted zombiephobe Nick Thorpe could not think of anything worse than *Forbidden Siren*'s zombie's-eye viewpoints.



[Xbox] Argonaut's aquatic racer was good and featured some nice water effects, but couldn't quite reach greatness.



[GameCube] Whether *Final Fantasy Crystal Chronicles* was worth the major hardware investment depended on which magazine you read.

"never know when you're going to get totally violated by one dismal design 'quirk' or another".

Thankfully, better things were happening elsewhere. On the GameCube, stealth remake *Metal Gear Solid: The Twin Snakes* scored 90% in *NGC*, which felt that it would be seen as "a far superior game to its original incarnation" due to the "seamlessly integrated" *Metal Gear Solid 2* mechanics and "remarkable attention to detail". However, it did query the game's "questionable lifespan" and "relative lack of extras". *Final Fantasy Crystal Chronicles* also arrived this month, taking the RPG series in a different direction with a multiplayer focus and GameCube to Game Boy Advance connectivity. *NGC* greeted the game with enthusiasm, scoring the "extraordinarily ambitious game" 86% and claiming that "once you're working as a team, there's nothing to touch it". *Edge* scored the game 6/10, feeling that it "asks too much expense and hassle" for what was on offer.

Chief complaints included a sense that opportunities for complex four player co-operation were quite limited, and that the crystal chalice mechanic designed to keep players tightly grouped was "ill-considered".

Over on the PS2, surviving the innovative horror *Forbidden Siren* required you to view the world through the eyes of its zombified villagers. *Official PlayStation 2 Magazine* felt that it was "unique, ambitious, genuinely scary and brilliantly executed", though its 9/10 review did note that it was "incredibly hard" and that the voice acting "inexplicably wanders into Jamie Oliver mockney territory". *Edge* was a little less impressed, scoring the game 7/10 for its "grand ideas" but lamenting its "outrageously bad combat and dogsbody objectives". *GamesMaster* felt similarly, awarding a 74% score. Also on the PS2, retro revival *Hyper Street Fighter II* earned 8/10 from both *Edge* and *Official PlayStation 2 Magazine*, with the latter praising the value of the game and anime movie package at £20. *GamesMaster* wasn't so keen, noting a lack of appeal for solo players in a 60% review.

Things were a little quieter on other formats. The only Xbox exclusive of note for the month was *Carve*, a jet ski racer which received 7/10 from *Edge* and 70% from *GamesMaster*, with the latter commenting that it "just doesn't get the sploshing-through-water feeling quite right". PC Gamer's Jim Rossignol felt that *Battlefield Vietnam* was "the best Vietnam war game so far" and "one of the best online multiplayer games of recent times". However, the 82% score reflected his opinion that "this is one game that you won't really care if you miss out on, but also a game that you'll definitely be glad of if you do decide to make it your next adventure behind a gun".

Join us again next month for fun and frolics, and a better chart topper. *

CHARTS

MARCH 2004

PLAYSTATION 2

1 – James Bond 007: Everything Or Nothing (EA)
2 – Final Fantasy X-2 (Square)
3 – Sonic Heroes (Sega)
4 – SOCOM II: US Navy Seals (Sony)
5 – The Simpsons: Hit & Run (Vivendi)

XBOX

1 – James Bond 007: Everything Or Nothing (EA)
2 – Deus Ex: Invisible War (Eidos)
3 – Grand Theft Auto: Double Pack (Take 2)
4 – Sonic Heroes (Sega)
5 – Prince Of Persia: The Sands Of Time (Ubisoft)

GAMECUBE

1 – James Bond 007: Everything Or Nothing (EA)
2 – Sonic Heroes (Sega)
3 – Mario Kart: Double Dash!! (Nintendo)
4 – Prince Of Persia: The Sands Of Time (Ubisoft)
5 – The Simpsons: Hit & Run (Vivendi)

MUSIC

1 – Toxic (Britney Spears)
2 – Cha Cha Slide (DJ Casper)
3 – Mysterious Girl (Peter Andre)
4 – Amazing (George Michael)
5 – Red Blooded Woman (Kylie Minogue)

THIS MONTH IN...

Official UK PlayStation Magazine

Issue 108 marked the end of the road for this magazine, which carried on alongside its PS2 equivalent for over three years. Much of the issue is bizarre celebratory fare, as only *XS Junior League Soccer* (5/10) and *Ford Truck Mania* (7/10) arrived for review. The demo disc with 20 Yaroze games justified the £4.99, though.

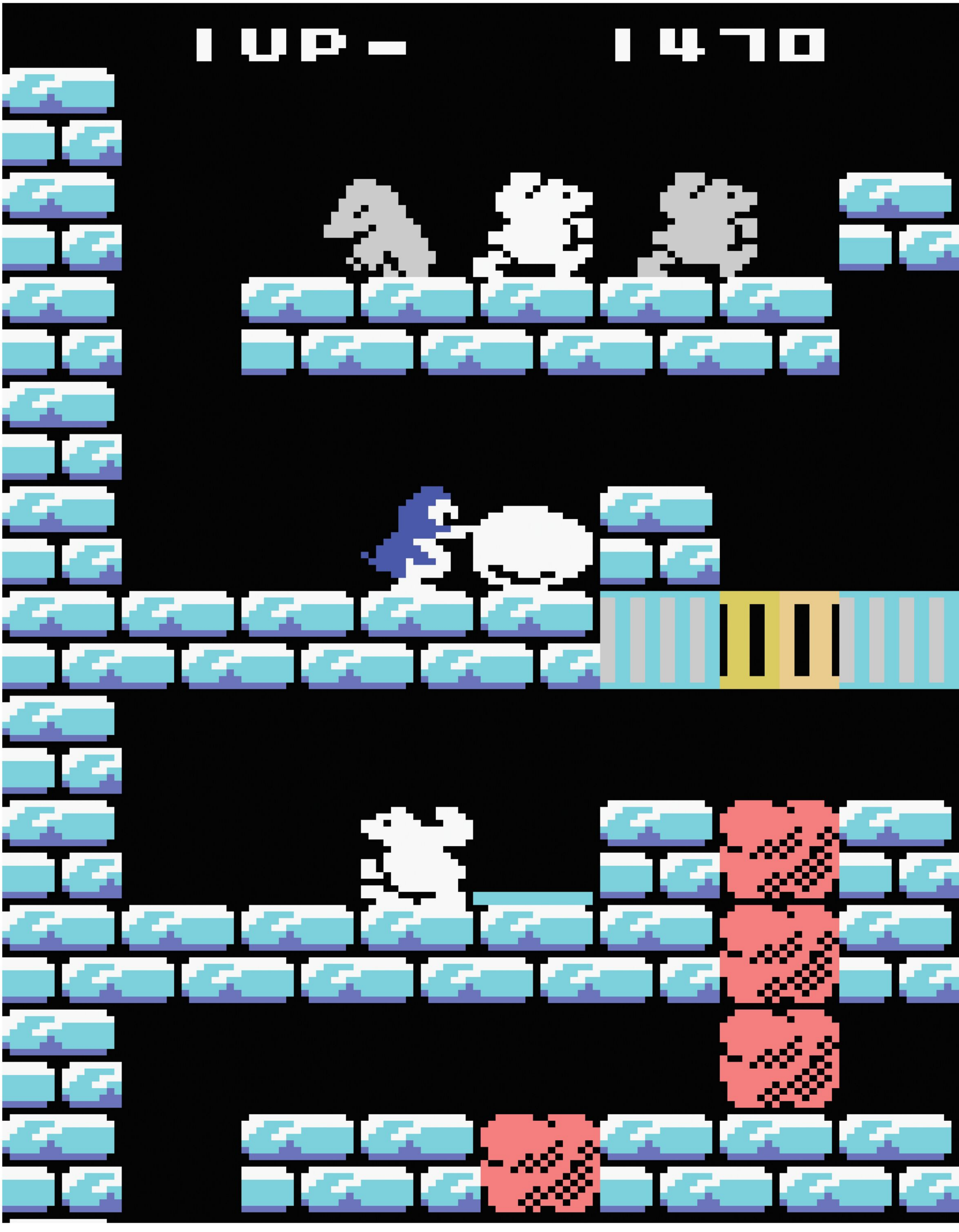
Edge

A special report this month looks at the rapidly evolving PS2 budget game scene, where the likes of Midas, Play It and Phoenix Games are all offering games for as little as £9.99. Phoenix Games' Paul Share explains that "the rule of thumb to break even is about 50,000 units per title" – achievable as budget games "have a much longer shelf life."

PC Gamer

"There's no use quibbling over whether *Vice City* deserves 94% instead of 93% if you don't understand why it got above 90 in the first place," says James Lyons. "So here's my request: play bad games." Why? "A wallow in the mire of mediocrity renews faith and fondness in what those titles at the top of the gaming tree are accomplishing."

1UP- 1470



Doki Doki Penguin Land

ANYONE FOR PENGUIN OMELETTE?

» SG-1000 » 1985 » Sega

I've long dreamed of blowing a silly amount of money on retro games in Tokyo's famous Akihabara shopping district, and 2020 was the year I was finally going to do it. I had my tickets booked, a substantial cash reserve and a walking route mapped around the key stores. But to quote the great philosopher Tracy Jordan, "If you want to make God laugh, make a plan – or read him a Dave Barry book." Dream dashed, I consoled myself by importing a Sega Mark III, because if there's one thing I need it's more 8-bit Sega hardware.

Weirdly I've actually picked up more SG-1000 games than Mark III games so far, and the one I've had the most fun with is *Doki Doki Penguin Land*, the precursor to the better known Master System game. If you've never played that, the idea is simple – you guide a fragile egg down a hazardous well, pecking a path through ice blocks while avoiding hostile animals. The egg really is key to the whole thing, as scrolling is fixed to the egg's position and you only lose a life if the egg is broken. Your penguin can only be temporarily stunned, and you can reach the top of the screen by dropping off the bottom. That's all great, but you don't get the luxury of time to think if you're trying to navigate a tricky area, as standing around for too long causes a mole to appear and start trying to break your precious cargo.

The mole taught me something important about the Mark III. Its colours in backwards compatibility mode are only an RGB approximation of the original SG-1000 palette, which used NTSC colour burst like the NES did. The mole in particular is a bit darker than it was intended to be, making it harder to spot against the black background. I actually don't mind that, though – I just have to pay a bit more attention while playing. And hey, when I do finally make that trip to Japan, it does leave me with an excellent excuse to pick up more hardware. *

CRITICAL MASS

THE STORY OF THE PS2

THE PLAYSTATION 2 BECAME THE VIDEOGAME INDUSTRY'S BEST-SELLING CONSOLE WITH SALES EXCEEDING 150 MILLION UNITS. BUT HOW DID IT REACH SUCH LOFTY HEIGHTS? RETRO GAMER TALKS TO PAST STAFF AND DEVELOPERS TO FIND OUT

WORDS BY DAVID CROOKES

DAVID REEVES

■ Former president and CEO of Sony Computer Entertainment Europe. David is now cofounder of E Fundamentals.

DAVID AMOR

■ Cofounder of Relentless Software, creator of the multi-million selling *Buzz!* franchise. Now a games industry consultant.

DAVID DARLING

■ Cofounder of Codemasters, which published many PS2 driving games. Now CEO of Kwalee.

It was Mark Twain who said, "Facts are stubborn things, but statistics are pliable," and yet in the case of the PlayStation 2, both stacked up rather nicely. You can give or take the odd hundreds or thousands, maybe millions, when discussing the sales stats of Sony's second console – 980,000 sold on its first day in Japan on 4 March 2000; 158 million worldwide over the course of its 13-year lifespan – but the fact remains: this was the biggest-selling console of all time and, handhelds aside, nothing else has ever come close.

PS2 was, without doubt, a huge success, coming hot on the heels of a revolutionary debut console. That first PlayStation smashed the stranglehold Nintendo and Sega had on the videogame market, introducing gamers to blockbuster, arcade quality 3D titles. And when Sony saw it had sold 3.4 million by 1996 and was well on its way to achieving 10 million by Christmas, there was only one option: to create a sequel bettering it in every way.

Ken Kutaragi played a key role in developing the debut console, earning the title 'Father of the PlayStation'. His expertise (which also saw him create a new sound chip for the SNES) ensured he was tasked with spearheading the follow-up. "Kutaragi started on the development of PlayStation 2 in 1996 and it was clear from the outset it was being designed with entertainment in mind," says David Reeves, former CEO and president of Sony PlayStation EMEA.

To aid development, Sony approached third-party companies, including LSI Logic Corp, to see what they could come up with. LSI Logic manufactured the microprocessor used for the PlayStation and had a stake in Argonaut which worked with Nintendo on the SuperFX chip used in *Star Fox*. It was asked to work on a rendering chip for the PS2 and so the task fell to Argonaut founder Jez San.

"Sony gave the company the specifications it wanted which was for the chip to achieve two million polygons per second with texture mapping," Jez tells us. "We designed the most efficient way to deliver Sony's desired performance but then LSI Logic told us we hadn't won the deal because it turned out that Sony had its own in-house chip design team that wasn't working to the same spec."

It turned out Sony's internal team was working to a higher spec to deliver a faster chip that could process more polygons per second. "Had we been told to design a chip to achieve five or ten million polygons per second, that's what we would have done," says Jez. But the decision to create the PS2's CPU and Graphics Synthesiser was pivotal. "Sony's own fabrication of the chips kept development internal and it also helped reduce the cost," says David.

Sony's Graphics Synthesiser was a parallel rendering engine capable of handling very high pixel fill rates and the RAM was situated on the chip, allowing for eye-watering performance. The 128-bit CPU clocked at 294.912 MHz, meanwhile, was called the Emotion Engine – deliberately emphasising its potential to take gaming to the much-vaunted 'Third Place' rather than extol its technological virtues.

"The generational advance in capabilities from PlayStation 1 to PlayStation 2 was the greatest I've experienced, before or after," says Mark Cerny, who had been contacted by the executive producer of product development, Shuhei Yoshida, about helping to develop the PlayStation 2's graphics engine.

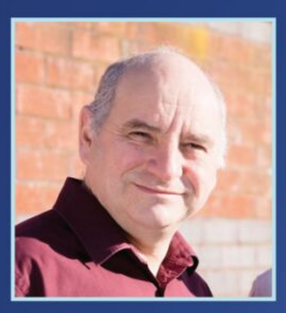
"The original PlayStation had a custom graphics architecture and had been very successful: it was not especially tricky to program and it could produce competitive 3D graphics," he adds. "Ken Kutaragi doubled down with the PS2. Its vector units were much trickier to use but had correspondingly higher performance." ▶

DAVID LAU-KEE

■ Founder and ex-CEO of Criterion Software, developer of the RenderWare engine. Now board member of various companies.

DAVID PERRY

■ Legendary videogame developer and ex-boss of Shiny Entertainment. Now CEO and cofounder of GoVyrl.



ANDREW OLIVER

■ Cofounder of Blitz Games Studios, creator of many licensed PS2 games. Now director of Game Dragons.

> "THE GENERATIONAL ADVANCE IN CAPABILITIES FROM PLAYSTATION 1 TO PLAYSTATION 2 WAS THE GREATEST I'VE EXPERIENCED, BEFORE OR AFTER"
> MARK CERNY

MARK CERNY

■ Consulted for Sony on its PS2 graphics engine and helped Naughty Dog and Insomniac with their first PS2 games. Mark is now the president at Cerny Games.

RAY MAGUIRE

■ Former senior vice president for UK, Ireland, Scandinavia and Benelux for Sony Computer Entertainment Europe. Now cofounder of Mindfitness Digital.

KEITA TAKAHASHI

■ Game designer and artist who created the cult hit *Katamari Damacy*.

JEZ SAN

■ Founder of Argonaut Software, asked to create a graphics chip for PS2. Now founder of FunFair Technologies.

KEITH JUDGE

■ Programmer who worked on PS2 games such as *Burnout: Revenge*. Currently director of LucknowGames.

PAUL HUGHES

■ Cofounder and chief technology officer at Warthog Games, a large independent game development studio. Now head of technology at Evidential.

JASON KINGSLEY

■ Cofounder and CEO of Rebellion Software, dev-for-hire during the PS2 era.

» Sony didn't shy away from some very risqué and some distinctly weird adverts for the PlayStation 2.

Mark worked on the PS2's graphics engine for three months in Tokyo. "I'd finagled a three-month sabbatical working in the same room as the programmers creating the demos that would ultimately be used at the PS2 announcement." By this point, he'd headed up Universal Interactive Studios and signed a three-person developer called Naughty Dog and a two-person start-up called Insomniac Games.

These deals led to the production of *Spyro The Dragon* and *Crash Bandicoot*. "With *Crash Bandicoot*, every polygon mattered and nothing could be wasted but the GPU in the PS2 was dozens of times faster than what we had in the PlayStation," Mark adds. "We had roughly as many polygons as pixels and the GPU inspired us to create expansive worlds: *Jak And Daxter* and *Ratchet & Clank* simply wouldn't have been possible on PlayStation."

While the innards were developed, work progressed on the design. Kutaragi wanted a unique look highlighting the power of the new machine so out went the cream/white look of the original and in came a mature consumer electronics design.

Black was chosen to symbolise space while gradations of blue symbolised the idea of life and birth. "I imagined life being born from the oceans," designer Teiyu Goto revealed in Future Publishing's first issue of the *Official PlayStation 2 Magazine*.

> "WE HAD ROUGHLY AS MANY POLYGONS AS PIXELS AND THE GPU INSPIRED US TO CREATE EXPANSIVE WORLDS: JAK AND DAXTER AND RATCHET & CLANK SIMPLY WOULDN'T HAVE BEEN POSSIBLE ON PLAYSTATION"
> MARK CERNY

Gamers could position the console horizontally or vertically and the front-loading disc tray ensured DVDs could be inserted regardless of whether it lay flat or on its side. When it was unveiled at the Tokyo Game Show in September 1999 – having been announced six months earlier – it split opinion. But PlayStation backward compatibility, the ability to play movie DVDs and a new DualShock 2 controller offering analog support for all of its in-play buttons quickly won over potential buyers.

"The DVD player was absolutely key to the success of the PS2 just as Blu-ray was for the PS3," says David. This certainly helped distinguish the console from the 128-bit Dreamcast released in 1998, a console already floundering despite being taken to many a gamer's heart.

By competitively pricing the console – it initially retailed for £300 in the UK – the machine was cheaper or on a par with most dedicated DVD players at the time. "DVD was also absolutely

GAMING FOR THE MASSES

THE PERIPHERALS THAT HELPED POWER PS2'S SUCCESS

BUZZ!

Following on from its debut in 2005, the *Buzz!* franchise went on to include 18 games in total, 13 of which were released on the PS2. They made use of a set of specially-designed USB controllers reminiscent of those seen in TV quiz shows, each sporting a red buzzer and four coloured option buttons, allowing for simple multiplayer fun.

GUITAR HERO

This game made air guitars redundant by allowing anyone with zero experience of playing an instrument to become a rock legend. A guitar-shaped controller included buttons that matched the notes shown on screen while the fully licensed classics made even non-gamers fancy having a go. Different guitars for subsequent games kept the interest rolling.

EYETOY

Sony released its fun webcam in July 2003 and by Christmas, two million European gamers had taken a look. Launched with *EyeToy: Play*, the peripheral allowed gamers to play 12 minigames by detecting the player's movement, thereby removing the need for a controller. Dozens of games – including *Lemmings* in 2006 – went on to support it.

SINGSTAR

Bundled with a pair of USB microphones, *Singstar* was karaoke with the added ability to score points. As such, players would have to sing along to the on-screen lyrics at the required pitch and hope to keep their voice in tune. They'd then be able to play their singing back – a nice touch that helped turn this game into a long-running family-fun franchise.

DANCE MATS

Dance Dance Revolution actually made its home debut on the PlayStation in 1998 but it also had a major impact on the PS2. *Dance Dance Revolution DDRMAX 6thMix* was its first PS2 entry, once again allowing the use of plastic floor pads to record the moves each player made. Other games using these mats included *In The Groove* and *Pump It Up*.

DVD REMOTE

The PlayStation 2 wasn't only a games console – it was a decent DVD player too and it helped pave the way for the mass-market adoption of this disc format, consigning VHS to history. The optional remote controller took its time to arrive but it made playback easier than using a controller and it gave gamers yet another excuse to have the PS2 in the living room.

necessary for many games such as *Jak And Daxter* – even with careful world layout, the loads were still pretty massive and I don't think that kind of seamlessly connected open world experience could have been created on CD-ROM," says Mark.

But while the PS2 attracted buyers who simply wanted to ditch VHS tapes and saw games as a bonus, there was no doubting Sony's number one priority. "Simply having the best games as exclusives was a vital factor for PlayStation," says David. "Publishers agreeing to PS2 game development was also important. Sony had learned that having great titles at launch and in the following year was a key factor so it had lined up titles with publishers and developers in advance and it supported their marketing."

As such, courting third-party developers and publishers was as crucial for the PS2's success as the hardware itself. "Third party relations has always been a major part of the business," says Ray Maguire, who was senior vice president of Sony Computer Entertainment Europe in the UK, Ireland, Scandinavia and Benelux until 2011.

"Clearly the console is an enabler for the content and, simply put, content is king. The close relationship with developers helps shape the way they use the power of the console to get the very best out of it."

PS2 launched with a diverse line-up that included *Ridge Racer V*, *Armoured Core 2*, *Dead Or Alive 2: Hardcore*, *Dynasty Warriors 2*, *FantaVision*, *Midnight Club*, *TimeSplitters*, *Silent Scope*, *Tekken Tag Tournament*, *SSX* and *X-Squad*.

"There was perspective correct texturing and texture filtering, upping the quality significantly," recalls Paul Hughes, then chief technology officer at Warthog Games. "More than that, the highly-tuned demos such as Dylan Cuthbert's *Rubber Ducks* were throwing around a serious number of triangles and gave a hint of what was possible on the platform."

The aforementioned *Jak And Daxter: The Precursor Legacy*, released in December 2001, was an early glimpse of what was possible. "It was a game so technically accomplished that Sony used to tour developers showing performance analysis graphs of how beautifully parallelised its vector unit and DMA usage was," says Paul. As such, the PlayStation 2 proved the perfect platform for debuting many amazing ambitious franchises – *Kingdom Hearts*, *God Of War* and *Devil May Cry* among them – while building upon those that had already made their mark, from a trio of Tomb Raider games (including a welcome reboot in 2006 called *Tomb Raider: Legend*) to definite highlights such as *Gran Turismo 4*, *Silent Hill 2* and *Final Fantasy X*.

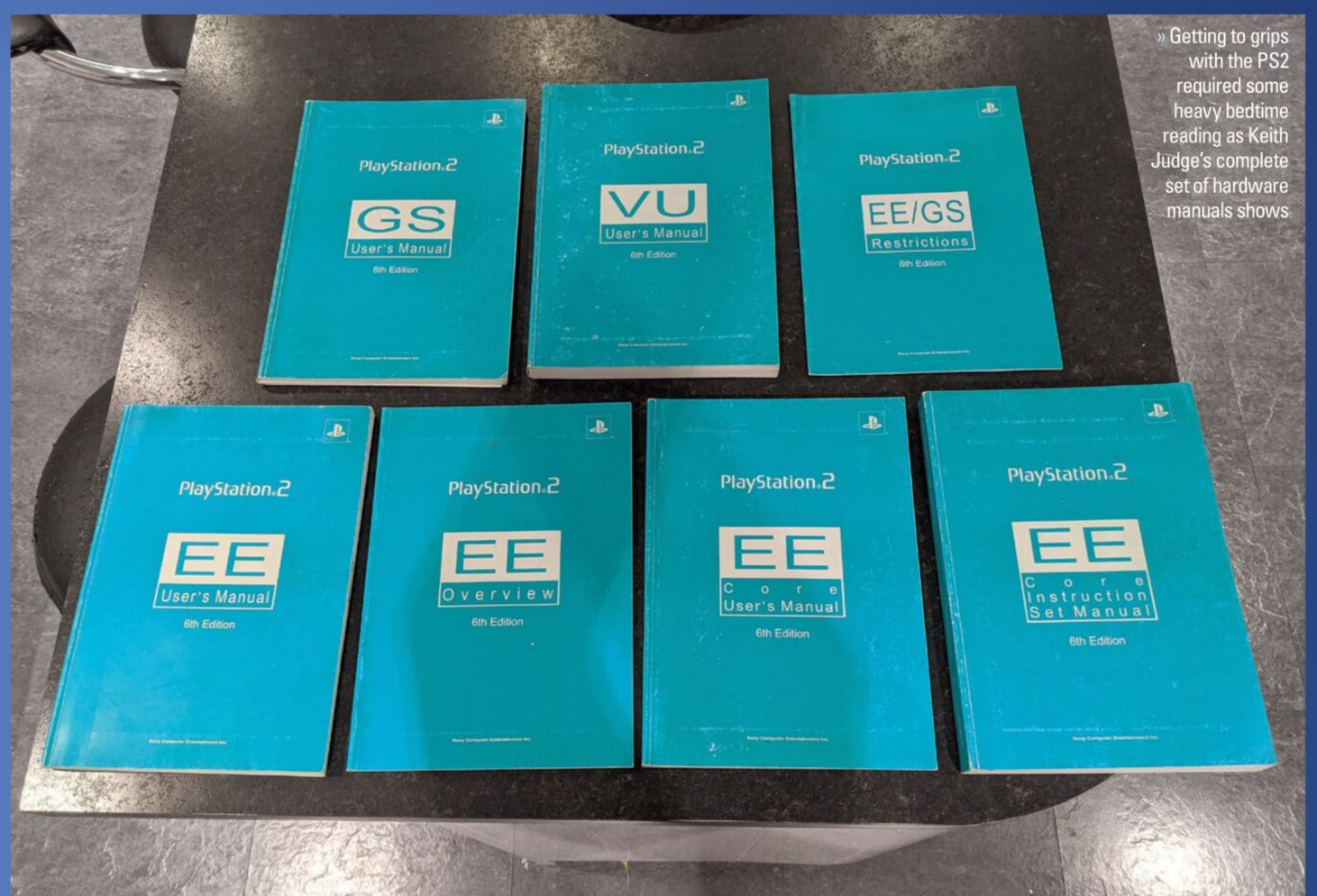
Sony was also keen to build on the relationship it had formed with standout talent such as Hideo Kojima, the director of *Metal Gear Solid*. *Metal Gear Solid 2: Son's Of Liberty* was a direct sequel and PS2 exclusive, with a huge amount of care going into its detailed environment.

"When *Metal Gear Solid 2: Son's Of Liberty* was introduced, jaws dropped in our office," says David Perry, then boss of Shiny Entertainment which was acquired by Infogrames during the development of *Enter The Matrix* (an ambitious game which included a hour of original footage and even had its own premiere party, showing how blockbuster videogames had become, see **Retro Gamer** 215 for more). "I really believed it forced us to take the PlayStation 2 even more seriously and our team then went on to make some assembly language tech demos that impressed even Mark Cerny."

For David, PS2 solved myriad problems. "Sony knew what it needed to do to tighten up the clunky issues the first PlayStation had and it also improved the controller," he continues. "Sony's people play games so those making the decisions knew what needed to be done."

Having different teams around the world worked in Sony's favour too. Phil Harrison, vice president, third party relations and research & development at Sony Computer Entertainment America, for instance, said Ray had created an independent spirit within Sony in the UK and he praised the support for British creativity. "Every territory in the PlayStation family has specific nuances which set it apart and each territory has a slightly different route to market," Ray tells us.

"It's vital that they had the support to maximise the potential and it also meant that games as part of the UK creative industries had started to get noticed as revenues rose to the value of other



» Getting to grips with the PS2 required some heavy bedtime reading as Keith Judge's complete set of hardware manuals shows

GOING LIVE

HOW SONY'S CONSOLE STUMBLED ONLINE

» The network adapter inserted into a vertical-standing PlayStation 2.

Online gaming on the PlayStation 2 got off to a stuttering start. While it would be great to report that it then hit its stride, in truth it generally floundered, much to the frustration of players. It wasn't for a lack of desire – Sony Computer Entertainment America (SCEA) president Kaz Hirai discussed online plans for the consoles at no less than three E3s and there was talk of selling 400,000 network adapters in the US by the end of 2002. But it was by no means as fluid a rollout as Xbox Live when it made its debut that year, nor was it as joined up as the service offered on Sega Dreamcast in 1998.

In some cases, it was about supply not meeting demand: *Final Fantasy XI* was hugely anticipated in 2003 but the required hard drive which needed the Network Adapter to connect online was slow to arrive, denting early sales. And while US gamers enjoyed a slew of titles compatible with the Dualband Modem, from *Madden NFL 2003* and *Twisted Metal: Black Online* to *Tony Hawk's Pro Skater* 4 and *EverQuest Online Adventures*, short initial supplies made SCEA bosses jumpy. Add the fact that Sony didn't even have a unified service nor an official name for its online capabilities and hiccups felt inevitable.

One of the issues was that the responsibility for online multiplayer games was left to the game publishers that ran them on third-party servers, needing gamers to have different identities to log on to each title. Then there was the little matter of Europe being left behind – forced to watch as the US and Japan got networked play first (unless they used unofficial convoluted workarounds). Connection issues dominated the agenda whereas, on consoles, you'd have expected a plug-and-play experience. One key game – *Resident Evil Outbreak* – even had to be stripped of its network-capabilities in Europe.

Yet Sony did learn from the experience. In 2006, it launched the PlayStation Network on the PS3 which finally provided the unified system that was sorely needed. The games that were released for PS2's online capabilities also helped break new ground and prove the appetite for online gaming was strong. *Final Fantasy XI*, for instance, was the first MMORPG to support cross-platform gaming between console and PC – something commonplace today. Its last official online server may have been turned off in 2016 but its legacy remains.

» The back of the network adapter which allowed for a broadband or dial-up connection.

PS2

HARDCORE HEAVEN

THE PS2 EXCLUSIVES THAT REMAIN UNIQUE TO SONY'S CONSOLE

GOD HAND

■ It's fair to say 2006 was a superb year for Clover Studios. It developed the sublime action-adventure, *Okami*, and then wowed gamers with *God Hand*, a quirky homage to the beat-'em-ups of days gone by. It split opinion, but its silly, no frills, repetitive nature nevertheless held some charm, even if your thumbs would blister by the end.

MISTER MOSQUITO

■ Mosquitos aren't generally a heap of fun if you're on the receiving end of one of nature's blood suckers but if you're controlling the insects and targeting other humans, well that's a whole different matter. This short but kooky game had players collecting blood without stressing the victims and its emphasis on timing ratcheted up the tension.

GRAN TURISMO 4

■ *Gran Turismo 4* raced into many a gamer's hearts and ended up becoming the third best-selling game on the PS2 (*Gran Turismo 3: A-Spec* was second). With 700 real cars to choose from, more than 50 tracks including Nurburgring Nordschleife in Germany and superb attention to detail, players could forgive the relatively basic AI and lack of car damage.

> "SONY SAW AN OPPORTUNITY TO PARTNER WITH DEVELOPERS RATHER THAN BEING PROTECTIONIST AND FIGHTING AGAINST THEM. THIS HELPED US TO GAIN A LOT OF MOMENTUM AND IT FELT LIKE THE BEGINNING OF THE HANDS-ON, DEVELOPER-FRIENDLY ROLE THAT PLATFORM HOLDERS PLAY TODAY"
>
> DAVID DARLING

GRADIUS V

■ This 2D side-scrolling sci-fi shoot-'em-up felt reassuringly retro when it appeared in 2004 and that was certainly pleasing given its roots in Konami's 1985 classic. Its fast action almost left you wheezy as tough obstacles and enemies tested your reflexes to the max, while the inclusion of two-player simultaneous play let you share your shredded nerves.

WE LOVE KATAMARI

■ Keita Takahashi's left-field sequel to *Katamari Damacy* was just as bonkers as the first game, getting players to once again roll an adhesive ball around the environment so that items smaller than the ever-increasing mass would end up sticking to it. Two-player co-op and competitive modes meant double the fun and critics could only applaud its sheer originality.

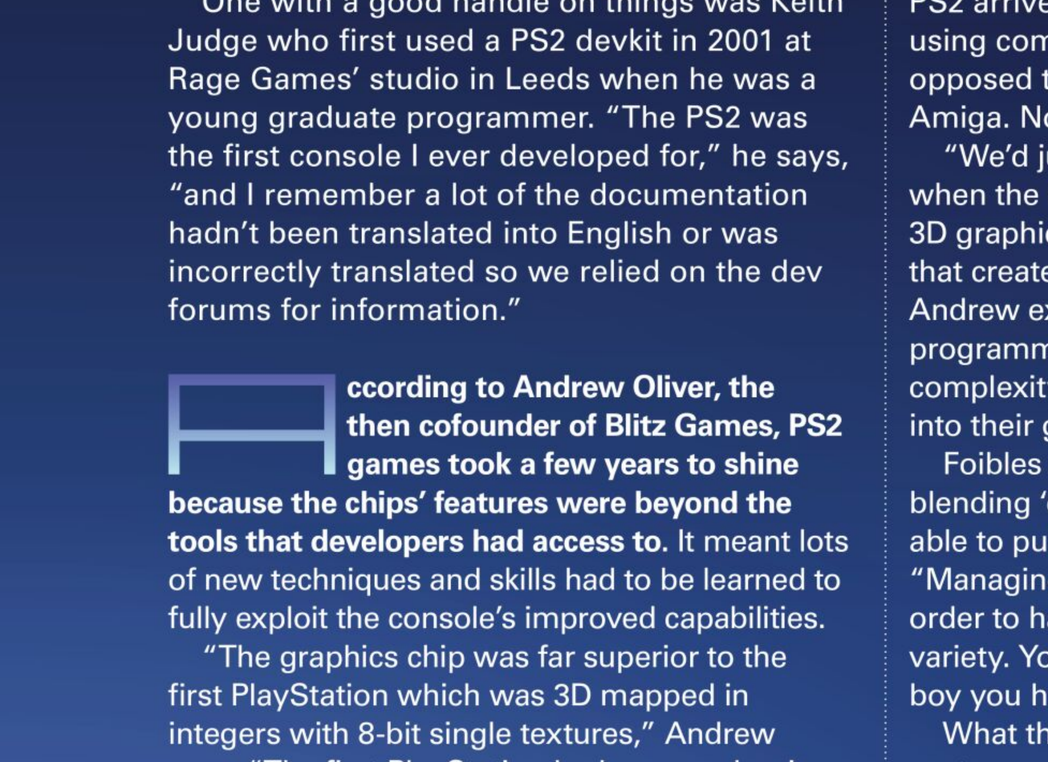
sectors." Even so, PS2 was more of a closed shop than PlayStation. It didn't have a direct equivalent of the Net Yaroze development kit that had appealed to hobbyists. Instead, there was a Linux kit which allowed the console to be used as a computer, providing an operating system, keyboard, mouse, network adapter and a 40GB hard disk drive. Harrison said there simply wasn't a business in selling semi-pro game dev tools to the consumer base and this pushed many in the homebrew community to the Xbox.

Not that development success is likely to have come easy even with such an equivalent. "To get the kind of performance that Sony demos were showing, you had to hit the metal – and hitting the metal was no mean feat," recalls Paul. "There was a certain type of person required to squeeze performance out of the PS2 and they were few and far between."

One with a good handle on things was Keith Judge who first used a PS2 devkit in 2001 at Rage Games' studio in Leeds when he was a young graduate programmer. "The PS2 was the first console I ever developed for," he says, "and I remember a lot of the documentation hadn't been translated into English or was incorrectly translated so we relied on the dev forums for information."

According to Andrew Oliver, the then cofounder of Blitz Games, PS2 games took a few years to shine because the chips' features were beyond the tools that developers had access to. It meant lots of new techniques and skills had to be learned to fully exploit the console's improved capabilities.

"The graphics chip was far superior to the first PlayStation which was 3D mapped in integers with 8-bit single textures," Andrew says. "The first PlayStation had some colouring from corners that developers would use for baked-in, pre-rendered lighting and every polygon was just printed, in full, in order, so a lot of care had to be taken to get their priorities correct. This often meant chopping up environments to lots of smaller polygons, but this was needed anyway since large textures would warp badly. PS2 fixed all of these issues."



» [PlayStation 2] From encountering prostitutes to pulling hapless citizens from their cars, *Grand Theft Auto* moved up a gear with *Vice City* in 2002.

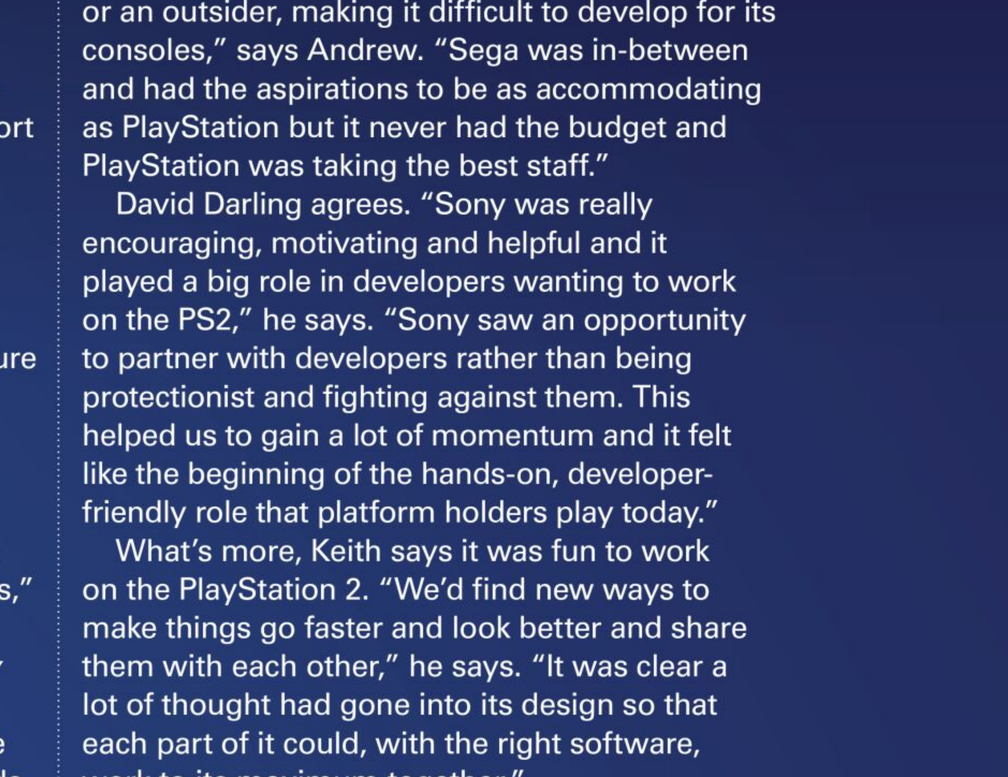
In many ways, it served to frustrate developers who had not long got their heads around Sony's single-minded view that all games should be 3D. By the time the PS2 arrived, developers had already begun using complex tools such as 3D Studio Max as opposed to early Photoshop or DPaint 3 on the Amiga. Now they had to learn again.

"We'd just about got comfortable with 3D when the PS2 came along boasting higher fidelity 3D graphics and Maya was not the chosen tool that created far higher fidelity 3D models," Andrew explains. "But it was expensive and programming teams were often horrified at the complexity of 3D models artists wanted to import into their game engine."

Foibles included not have multiplicative blending 'out of the box' but developers were able to pull off effective tricks over time. "Managing texture memory was a dark art in order to have a high framerate and a lot of texture variety. You could make the platform sing, but boy you had to work for it," says Paul.

What the PS2 did have, however, was a vast amount of fill rate. "You could afford to render your visuals in multiple passes to create multiplicative lightmaps, light blooms and hazes," continues Paul, whose company developed *Harry Potter And The Philosopher's Stone*, *Rally Championship*, *Battlestar Galactica* and more.

It did mean publishers needed to throw more money at development but the potential rewards were great. "The PS2 pretty much required developers to jump in and get their hands dirty," remarks Codemasters cofounder David Darling. "There were people who were experts at that kind of low-level coding and they were lucratively employed just to code for some of the graphics chips." Sony understood the difficulties. It held its own developer conferences attended by hundreds of people. Studios were also allocated account managers and technical staff. "This was different from Nintendo where you'd either be in its dream team or an outsider, making it difficult to develop for its consoles," says Andrew. "Sega was in-between and had the aspirations to be as accommodating as PlayStation but it never had the budget and PlayStation was taking the best staff."



» [PlayStation 2] A PS2 exclusive, *God Of War* was released in 2007 at a time when the PS3 had made its debut, but it proved to be one of the console's best-ever games.

David Darling agrees. "Sony was really encouraging, motivating and helpful and it played a big role in developers wanting to work on the PS2," he says. "Sony saw an opportunity to partner with developers rather than being protectionist and fighting against them. This helped us to gain a lot of momentum and it felt like the beginning of the hands-on, developer-friendly role that platform holders play today."

What's more, Keith says it was fun to work on the PlayStation 2. "We'd find new ways to make things go faster and look better and share them with each other," he says. "It was clear a lot of thought had gone into its design so that each part of it could, with the right software, work to its maximum together."

Even so, developers looked for easier ways of making games and it led to a greater reliance on third-party engines, notably RenderWare. Prior to the PlayStation 2, developers generally wrote their own engines and, although they could use the low-level tools from the SDKs and utilise example code to draw models, set up textures and lights and so on, they were not enough for full-blown games.

"By getting a PS2 rendering backend written for RenderWare, Criterion nailed its flag to the mast," says Paul. This 3D API and graphics rendering engine was used by Rockstar Games for *Grand Theft Auto III* (as well as *Manhunt*, *Bully*, *Grand Theft Auto: Vice City* and *Grand Theft Auto: San Andreas*). "The use of RenderWare for *Grand Theft Auto* gave the engine credence," argues Paul. "If it was good enough for GTA, it was good enough for us."

Grand Theft Auto III made its debut on the PS2 in October 2001, ahead of a release on the PC

» [PlayStation 2] *FIFA 2002* continued the hit football franchise and yet it wasn't the best with *Pro Evolution Soccer*'s focus on real football as opposed to licences winning this time.

▶ the following May and the Xbox in November 2003. It became an immediate classic, moving the *GTA* series into 3D and producing a game so monstrous of size that it changed the perception of what the PS2 could achieve.

"RenderWare was on version three when the PS2 was released," says David Lau-Kee, cofounder and CEO of the Criterion Software Group. "But PS2 represented the tipping point. The question we'd always asked was 'do you want to make games or make game engines?' because making and maintaining a game engine is a phenomenal undertaking. For the first time, that question had real resonance and we worked incredibly hard to give developers a choice to focus on gameplay versus engine tech."

As well as *GTA*, RenderWare stood out, in particular, within Ubisoft's *Rayman* and Konami's *Winning 11/Pro Evolution Soccer*. "Those were huge successes, in very different genres and both category leaders," continues David, proudly. "I remember there was a year when *Pro Evo* was generally considered to be better than *FIFA* and I loved feeling that we had contributed to that."

» [PlayStation 2] *Ico* proved that an artistic game was more than a perfect match for the PS2.

RenderWare dramatically cut development time, providing a vast breadth of graphics functionality and a deep toolchain that integrated many disparate parts of the development process, as David Lau-Kee explains. "This is something that is generally misunderstood – the expectation is that the core value is in the low-level graphics engine when, in fact, toolchain and workflow integration is actually the most essential characteristic."

So would the PS2's impact have been lessened if it was not for RenderWare? "I don't think so," continues David. "But the whole 'tools and middleware' programme at PlayStation was supported by Ken Kutaragi and orchestrated brilliantly by Masa Chatani. I think we played our part, particularly in making it accessible to a far larger developer community far earlier than would otherwise had been the case. But that was exactly as Kutaragi and Chatani intended so I think about it the other way around: without PS2, RenderWare would not have had the same impact."

Not that the PS2 was always about being technologically advanced. "We were a work-for-hire developer and you typically don't get to do the cutting edge technology games," says Rebellion Developments' cofounder Jason Kingsley, whose PS2 titles included *Judge Dredd: Dredd Vs Death*, *Sniper Elite* and *Rogue Trooper*.

For many developers and publishers, what the PS2 provided was a solid platform with a huge number of potential customers. It allowed creativity to flow and gambles to be made (Mark cites *Katamari Damacy*, a cult classic by Keita Takahashi). "There was a range of games and localised games," adds Ray. "The development community took the platform to heart."

» [PlayStation 2] The PS2 got better with age as the award-winning *Shadow Of The Colossus* in 2006 showed – some six years after the console launched

Blitz epitomises this, making titles such as *Pac-Man World 3*, *American Idol* and *Zapper: One Wicked Cricket*. "We made 19 games on PS2 and all had good and bad aspects, technically, artistically, financially and commercially," says Andrew. "But the main thing the PS2 brought was larger, exceptionally well-crafted games with polished pre-lit 3D worlds and characters that looked silky smooth and often spoke."

Efforts were made to make playing games more comfortable and innovative. Sony released a new DualShock 2 which proved attractive to some developers. "I kinda loved the technical limitations that the PS2 offered compared to later consoles but I chose the console as the platform for my early work because both joysticks were not offset and that was very important for *Katamari Damacy*," Keita Takahashi tells us.

The addition of a USB port also widened options, particularly for peripherals. Alternative, family-friendly, mass-market controllers were made in abundance such as the EyeToy camera,

SERIES STARTERS

THE BIG GAMES THAT BECAME BIGGER FRANCHISES

GOD OF WAR

■ *God Of War* from 2005 was built on a simple enough hack 'n slash premise and involved lots of button bashing. But, under the direction of David Jaffe – fresh from the development of *Twisted Metal: Black* – its speedy combos, slick structure, smooth animation and easy flow created an instant classic.

KINGDOM HEARTS

■ Square released *Kingdom Hearts* in 2002 and it was a curiosity from the very start, combining characters from the *Final Fantasy* series with those from Disney – perhaps about as chalk and cheese as you'd get. But this action role-playing game with a healthy dose of hack 'n slash somehow worked.

MONSTER HUNTER

■ By no means a perfect game, *Monster Hunter* suffered as a single-player offline jaunt because it lacked some of the features and creatures of online play. When connected it began to shine, allowing for a fun adventure with other players and, as each sequel has shown, this provided the perfect base for a complex franchise.

DEVIL MAY CRY

■ *Devil May Cry* grew from the development of what should have been *Resident Evil 4* on the PS2. When it became clear that the new game wasn't going be in the *Resi* mould, it moved away from its horror survival roots and became an over-the-top, hack 'n slash action adventure packed with athletic moves and demons aplenty.

the microphone of *SingStar* and the big red buttons of *Buzz!* showed. "Those buzzers brought approachability," says David Amor, the then creative director of *Buzz!* creator Relentless Software.

"We'd worked exclusively with Sony on a DJ game and some versions of EyeToy and *SingStar* and we were talking to them about what we might do next," he continues. "They told us a company called Sleepy Dog had approached them with a licensing agreement for music clips and an idea to make a quiz game so we proposed a music quiz set in a TV gameshow but we wanted to make it about entertainment rather than be a music test.

"My business partner, Andrew Eades, suggested having buzzer peripherals and, while parts of the gaming press pointed out that they didn't add anything that couldn't be done with a regular controller, that was missing the point."

Once the PS2 established itself, there really was no going back. The console continued to make its presence felt, extending to 129 markets in Europe, the Middle East and Africa.

The PS2 also made a name for itself in other ways, not least through a 'radical' approach to advertising that included a tattooed baby, a man smelling underwear with a hand down his trousers and a strange orgy – a controversial approach that nevertheless gained attention.

There was even a story claiming Iraq's dictator Saddam Hussein bought 4,000 PS2s and was planning to build a crude military super-computer.

> "THE PRICE OF THE HARDWARE KEPT COMING DOWN AS MAJOR COSTS WERE TAKEN OUT OF PS2 EACH QUARTER AND THE MACHINE BECAME SMALLER"
>
> DAVID REEVES

No controversy seemed to dent the console's popularity, however, and Sony even made friends within the videogame sector that had arguably been most affected by the success of the PlayStation: the arcades. Namco adapted Sony's tech into the System 246 board that powered *Tekken 4* and *Time Crisis 3*, and was used by Capcom and Taito. Konami's Python hardware was also PS2-based. But it also worked on refining its core product, solving issues with PS2 heat dissipation by changing the chassis and consolidating the chip which, made manufacturing less expensive.

"The price of the hardware kept coming down as major costs were taken out of PS2 each quarter and the machine became smaller," says David Reeves of a console that sold for £99 in its slimmed-down form in 2004. "Piracy was gradually eliminated and PlayStation became a well-accepted brand, going as far as becoming a sponsor of the UEFA Champions League. We'd always have a big presence at E3, Gamecom and the Tokyo Games Show."

And this, arguably, is the secret of the PS2's success: a console which didn't rest and continued to be marketed and improved, becoming cheaper and expanding its market each year. Developers in at the start gradually became more familiar with the machine and produced ever greater titles.

"I think PS2 more than most other consoles had a massive gulf in quality between launch games and the games nearer the end of its lifetime as this process of understanding its nuances continued for years," says Keith.

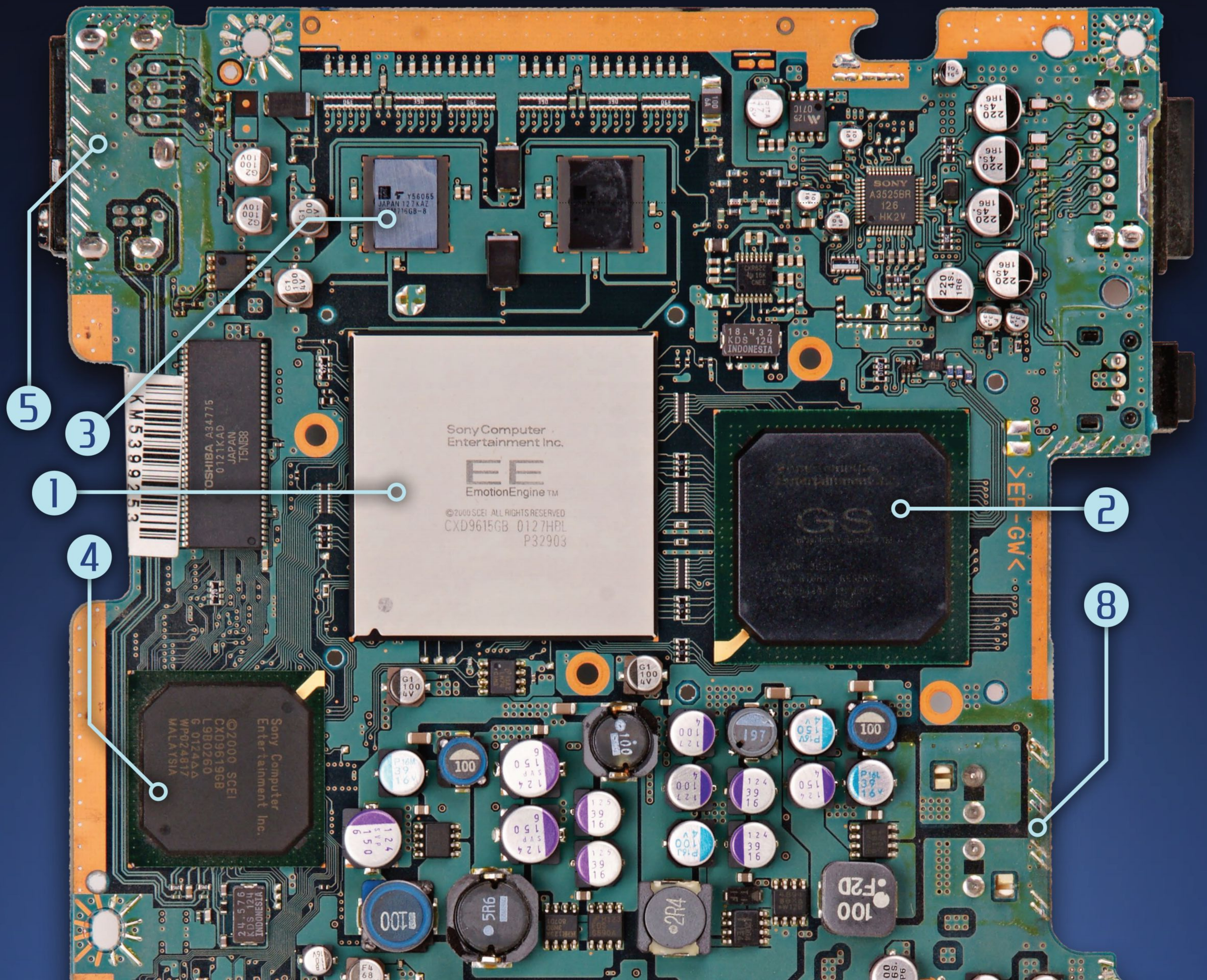
Indeed, with a bigger market than Xbox at the time, PS2 simply established itself as the console of choice for so many developers. "In retrospect, PS2 really was the Goldilocks console – not too much to handle and a good return for the time invested in it," says Mark. "I think that had a lot to do with it becoming the most successful console of all time." ✱

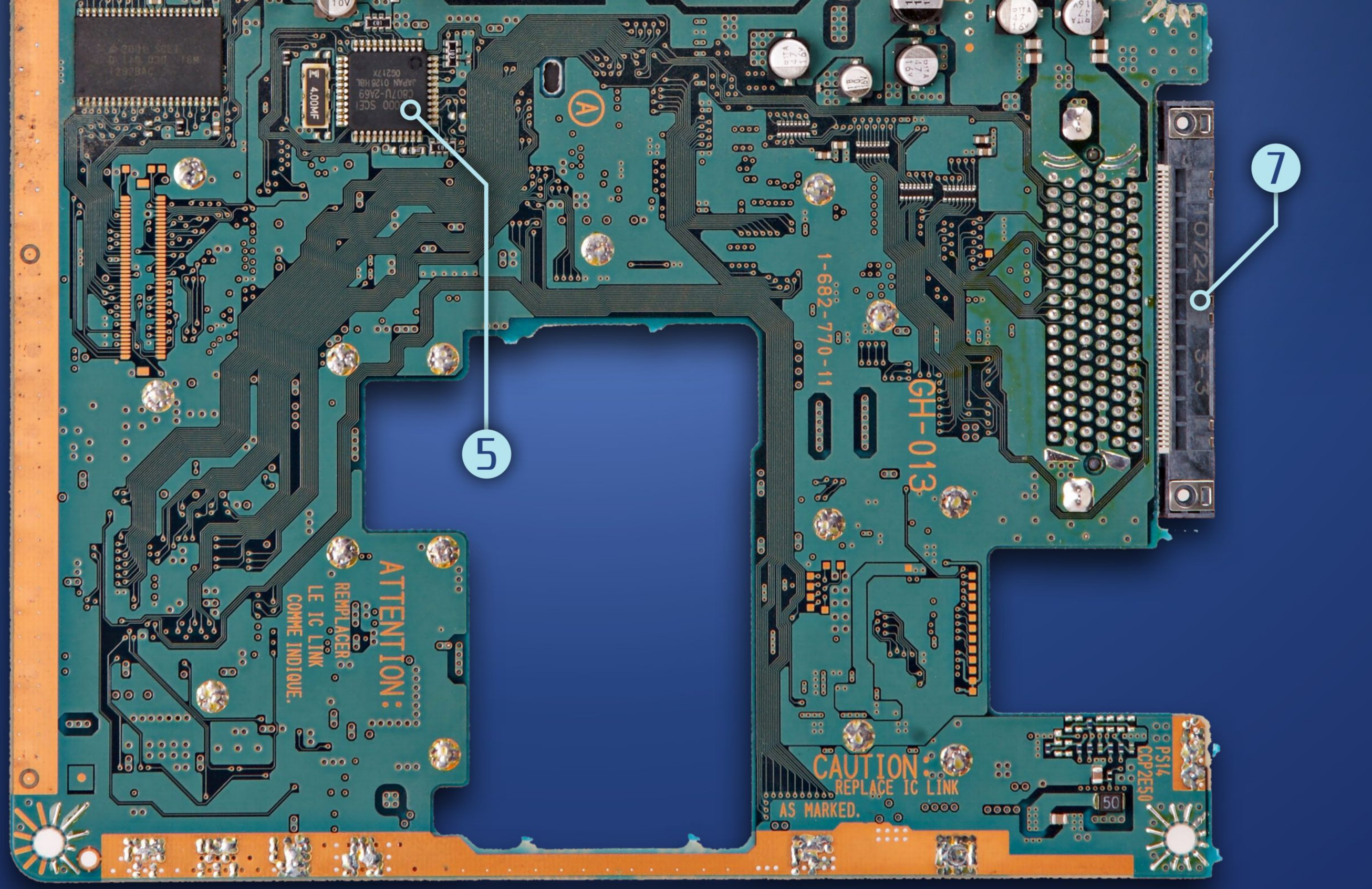
YAKUZA

■ A beat-'em-up based on Japanese mafia crime dramas, this linear game by Sega is driven by its story and there's enough action to sink your fists into as you explore its open world. It's high on interaction, allowing you to chat with NPCs, buy items from shops and visit seedy joints, making for a compelling mix that remains popular today.

UNDER THE HOOD

HOW SONY POWERED ITS SUPER SEQUEL





1

EMOTION ENGINE

■ Developed by Sony, the Emotion Engine is a chipset running at ~294.912 MHz that includes a CPU core, two Vector Processing Units, a 10-channel DMA unit, a memory controller and an Image Processing Unit.

2

GRAPHICS SYNTHESISER

■ With 4MB of DDRAM and running at ~147.46 MHz, the Graphics Synthesiser is a GPU which handles various hardware effects such as transparency, perspective correction, mip mapping and 3D Bezier surfacing.

3

ONBOARD MEMORY

■ Sony's popular console is fitted with a total of 32MB of main memory, which is made up of two 16-bit PC800 RDRAM chips (in comparison the Dreamcast has 16MB). It allows for a memory bandwidth of 3.2GB/s of memory.

4

INPUT OUTPUT PROCESSOR

■ The I/O processor actually has an original MIPS R3000 at its core – the same as that found in the debut PlayStation. It's underclocked to allow backwards compatibility with original PlayStation videogames.

5

BLISTERING SOUND

■ The Sound Processing Unit 2 consists of two PlayStation sound chips combined with extra on-chip RAM. It can handle 48 channels of DAT quality audio and output to a Dolby or DTS 5.1 surround sound system.

6

FRONT PORTS

■ As well as two handy USB ports (which were often used for peripherals) and a memory card slot, the PS2 has an i.LINK port – Sony's name for FireWire. It allows digital data to be transferred between devices.

7

EXPANSION BAY

■ A 3.5-inch drive bay allows a network adapter and HDD to be installed in the back of the console. Games were released in North America and Japan to take advantage of this and included *Final Fantasy XI* and *Ace Combat 4*.

8

COOL RUNNING

■ All these components mean the PlayStation 2 could – like the original PlayStation – get very hot, so a 50mm fan was used to keep things cool. Blocking the fan's vent is a sure way to kill your beloved console.

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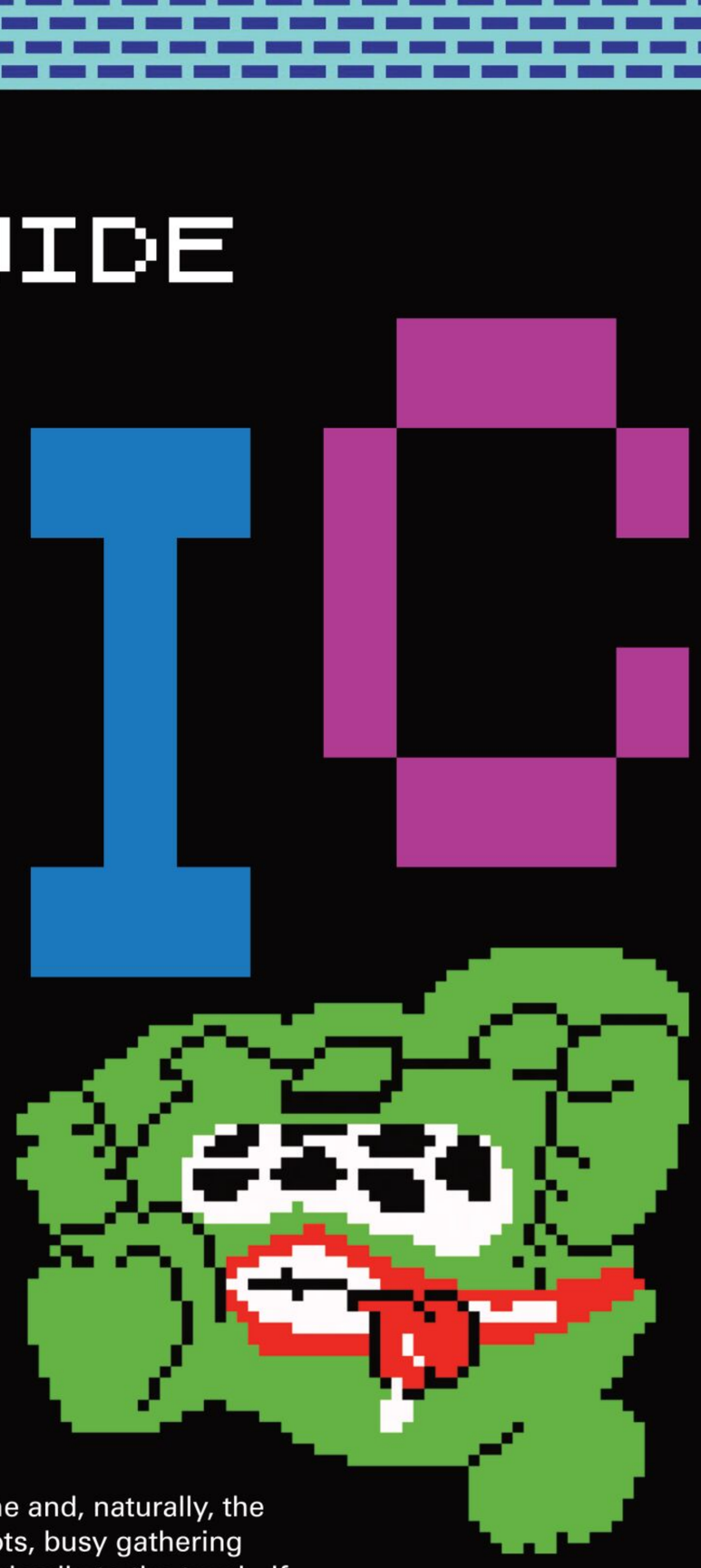
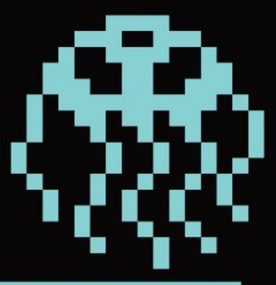
ULTIMATE GUIDE

MANIC MINER

It's the legendary platform game that instigated a whole genre and introduced the world to wonders such as Eugene's Lair and The Central Cavern. Revered by a whole generation of Spectrum gamers, this is the ultimate guide to the pixel-perfect legend that is Manic Miner

Words by Graeme Mason





AMOEBATRON

BARREL

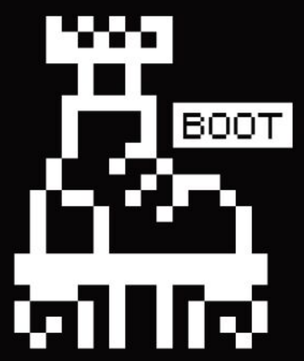
"It was like a dream come true to work on Manic Miner"
AMSTRAD CODER STEVE WETHERILL

First published in 1983, Matthew Smith's *Manic Miner* was a smash-hit sensation. Devised within eight weeks by this precocious teenager in his bedroom, the talented coder would soon also assume a mythical status among Spectrum owners. The legend of both Matthew Smith and Miner Willy begins here.

And it starts with a story as odd as some of its graphics. While prospecting for treasure in the wilds of Surbiton, Willy discovers an ancient mineshaft. Unable to resist the urge to explore, the valiant miner is soon delving deep into these strange caves, inhabited by the automatons left over from a superior civilisation, lost in time. With their masters destroyed by war, these robots continue to mine valuable minerals. Struck by the beautiful glowing treasures that lay in each cavern, Willy realises that this is his opportunity for fame and fortune, should he be able to dodge the deadly occupants of this ancient underground realm. These hazards take on the form of poisonous flowers, spiders, slime and, naturally, the aforementioned robots, busy gathering precious metals and deadly to the touch. If Willy is to claim his prize and escape these mines, he must evade them all. Fortunately, this miner has an athletic jump and a considerable air supply for each cave.

Each screen has a number of flashing keys strewn around. Some are picked up easily, while others perch awkwardly, guarded by the peculiar robots – or as the cassette inlay boldly explains "MANIC MINING ROBOTS". Once Willy has collected all the keys to a particular level, the exit door pulsates, and he can make his escape to the next room. The keys vary according to the idiosyncrasies of the screen that Willy finds himself in: snowshoes feature in the Cold Room, while ten pence pieces and peeled bananas are the collectibles in the Mutant Telephones and Kong levels respectively. Each item nets Willy 100 points, while completing a level gives him a bonus, calculated by how much air he has remaining. For every 10,000 points, there's a very welcome extra life.

FLAG
BUG



BOOT

THE MINER FILES
■ The title screen music is *The Waltz Of The Blue Danube* by Johan Strauss.

THE MINER FILES
■ The final exit icon is the Greek letter Omega, signifying the end of the game.

MINER

THE LEGACY OF MINER WILLY

HE INSPIRED A WHOLE NEW GENRE OF SPECTRUM GAMES – BUT HOW?

THE TITLE SCREEN

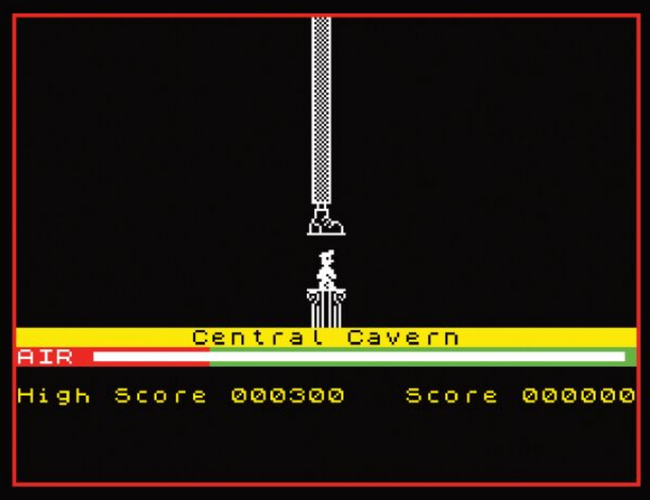
The words 'MANIC' and 'MINER' flash alternately upon loading in big and bold letters. With many early Spectrum games even lacking a loading screen, this was an energetic thrill, and other developers were soon imitating the design.

LEVEL PREVIEWS

While listening to the jovial music of *Manic Miner*'s start screen, the game suddenly flicks to previews of what lies ahead for this underground explorer. Essentially an attract sequence, many other games were soon imitating this trick from the arcades.

LOTS OF SCREENS

In 1983, the vast majority of Spectrum games were one-screen, and often arcade clones. *Miner 2049er*, *Manic Miner*'s forebear, housed a dozen screens, while Matthew Smith's debut had a mind-boggling 20 screens to discover.



GETTING THE BOOT

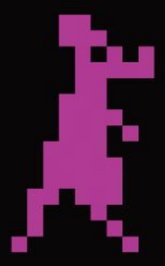
They are the words that are familiar to any gamer of any generation: game over. And in *Manic Miner*, they were famously accompanied by a large boot, descending at pace onto poor Miner Willy's head. Game over screens would never be the same again.

IN GAME TUNE

Music itself was a rarity on the ZX Spectrum in 1983; an actual tune, playing throughout a game *and* with sound effects was something that many even thought impossible. Matthew Smith proved them wrong.

COLOURFUL AND STRANGE SPRITES

For *Manic Miner*, praise was common for its variety of crazy graphics. With its sliding penguins, clockwork robots and circus seals, this was the acclaimed game with imagination that inspired graphic artists everywhere.



KANGAROO

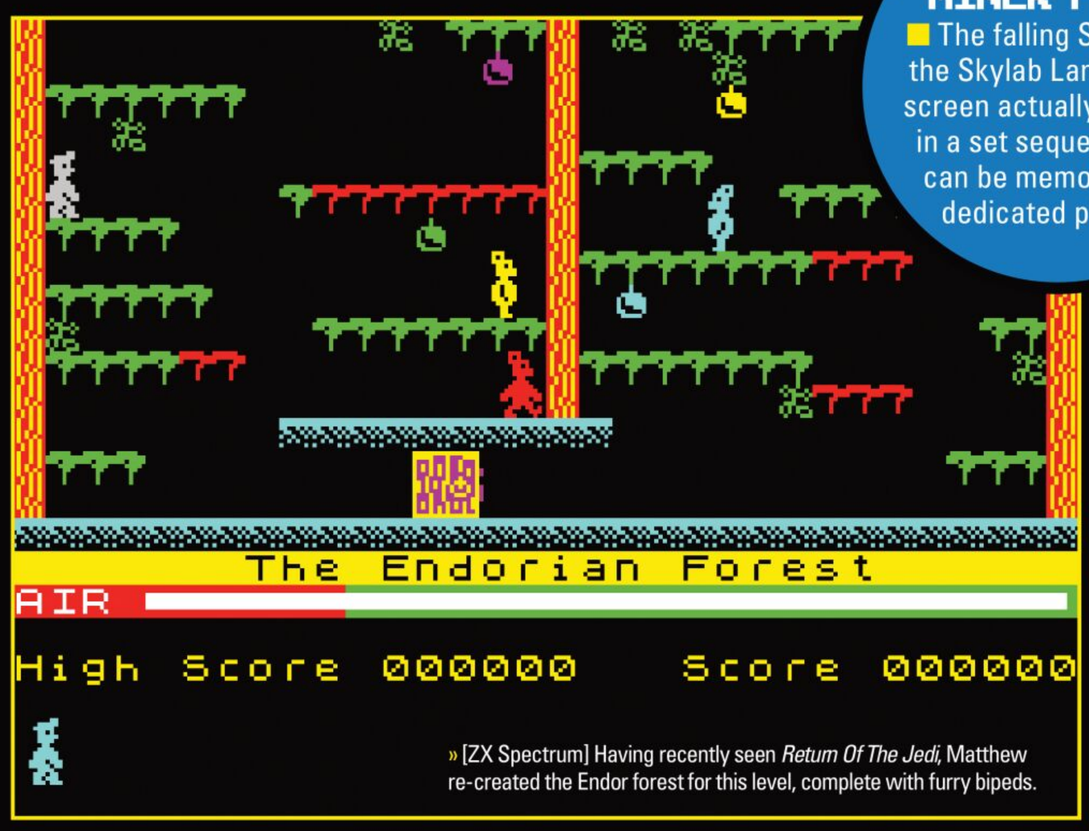
"Full of humour, horror and wholesome addiction"
C&VG REVIEW OF MANIC MINER

» [ZX Spectrum] Where it all starts: the Central Cavern.

» [ZX Spectrum] Eugene's Lair, a mash-up of the success of fellow coder, Eugene Evans, and the snapping toilet monster story that Matthew used to tell to his brother.

THE MINER FILES

The falling Skylabs of the Skylab Landing Bay screen actually descend in a set sequence, and can be memorised by dedicated players.



» [ZX Spectrum] Having recently seen *Return Of The Jedi*, Matthew re-created the Endor forest for this level, complete with furry bipeds.

» [ZX Spectrum] Where it all ends: The Final Barrier.

CONVERSION CAPERS

ZX SPECTRUM

The original Matthew Smith classic. First released by Bug-Byte, then Software Projects, it's the iconic legend that helped to define the ZX Spectrum. It's a testament to the game's enduring appeal that when *Manic Miner* was finally reviewed in *Crash* magazine in 1989, it received a Crash Smash – not too bad for a six-year-old game.

COMMODORE 64

Converted by Software Projects' Chris Lancaster, the Commodore 64 port, while not quite having the legendary cachet of its Spectrum forebear, remains an excellent game, only let down by some slightly iffy collision detection. Oh, and the music, which while just about acceptable for Spectrum owners, is not quite what Commodore owners were used to.

COMMODORE 16

Squeezing the 20 levels of *Manic Miner* into 16k is an admirable effort, and to be fair, much of the game's playability is retained. As you'd expect, many of the famous frills are gone, as are some of the enemies and the music, which could be a good or bad thing, depending on your liking of the incessant loop of the Grieg piece.

AMIGA

There are two versions for Amiga owners: the original game, recreated faithfully, and an updated game, featuring improved graphics, sound and a new tune. While the latter game is undeniably an improvement aesthetically, in our opinion, something of the classic look of *Manic Miner* is lost with its zoomed in view, and it just doesn't have the verve of the original.

AMSTRAD CPC

Created by Steve Wetherill and Derrick Rowson, this Amstrad port was released by both Software Projects and Amsoft in 1984 and 1985 respectively. Improved sound aside, it's a near-identical port except for the final screen, possibly altered for memory-saving considerations. Probably the most faithful of the 8-bit conversions.

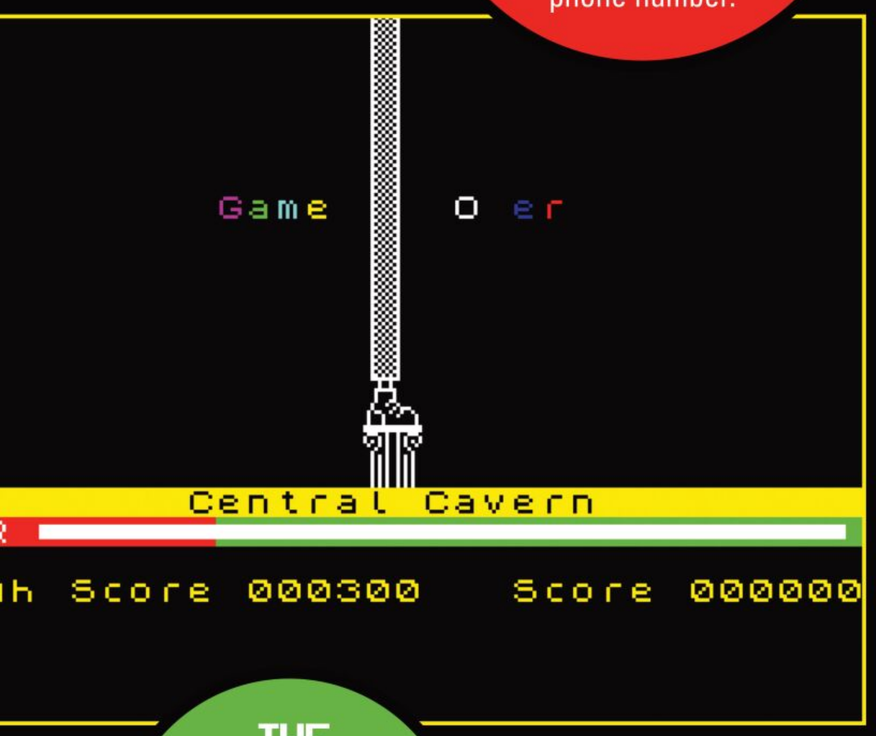
BBC MICRO

With its altered colour scheme and an air meter on the left rather than below the game screen, the BBC Micro version is certainly visually diverse. It is substantially slower than the other versions, too, which for a game requiring fine timing such as *Manic Miner* is frustrating. This is one of the poorer 8-bit ports available to play.

CLOCKWORK ROBOT

THE MINER FILES

■ The Bug-Byte version has a cheat mode that is activated by typing in an approximation of Matthew Smith's driving licence number. It's sometimes mistaken as his old phone number.

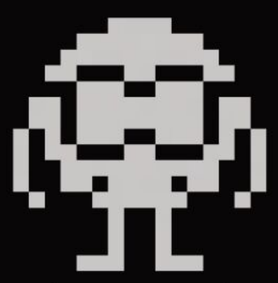


» [ZX Spectrum] When all lives are lost, it's time for the *Monty Python* boot to squish Willy.

THE MINER FILES

■ The cheat code was changed to 'typewriter' for the Software Projects release.

EXIT DOOR



EUGENE

MUTANT TELEPHONE

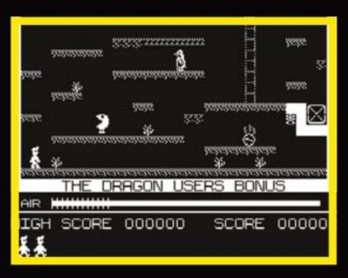
▶ The individual 20 screens form another character in *Manic Miner*. From the Central Cavern, complete with its lone *Yellow Submarine*-inspired robot, to its author's homage to arcade games such as *Donkey Kong* (Miner Willy Meets The Kong Beast) and *Pac-Man* (Processing Plant), there are references behind most of the offbeat denizens. In fact, with levels such as Endorian Forest, The Bank, Abandoned Uranium Works and Eugene's Lair all displaying some sort of nod to the Eighties, *Manic Miner* can easily be viewed as a unique snapshot of a decade that gave us blockbuster movies, nuclear paranoia and yuppies. And everyone remembers the first time they encountered those Skylabs, crashing down perilously close to Miner Willy's head, or the Solar Power Generator with its air-sapping beam randomly stabbing at our hero.

In addition to the levels, the lost mine's inhabitants became forged in Spectrum lore, a tribute to the imagination of the game's creator. The bespectacled and rotund Eugene springs up and down his lair; penguins shuffle backwards and forwards in the Cold Room; and Pac-Men, now with legs, bounce around the Processing Plant, eager to munch on anyone foolish enough to get near. Even the static enemies, spiders, slime, spikes and plants are plotted deviously, and often require perfect jumping in order to pass by unscathed. In the successful commercial years of the ZX Spectrum that followed, there were many tough games – yet few could match the ferocious challenge of *Manic Miner*'s rigorous screens.

And on top of this problematic perch stands the Solar Power Generator. "It's sort of complicated… but it's not a particularly hard level," noted Matthew innocently in **Retro Gamer**'s Making Of *Manic Miner* back in issue 48. Containing much of the infamous pixel-perfect jumping that permeates the game, this penultimate screen also sends a random beam of light at right angles which rapidly diminishes the miner's air supply. Together with Skylab Landing Bay, it remains one of the most challenging pieces of gaming ever.

As befits its classic status, *Manic Miner* was released several times throughout the Eighties. Firstly, there's the original Bug-Byte version, which came in two different cassette inlays. In the first, a chubby Miner Willy is running away from a robotic hand, clutching a ladder and some gleaming treasure. For the Liverpool company's second release, the cover is much altered, depicting a bearded, god-like Willy holding a lantern and looking aghast at a bony hand before him. Later in the same year, when Matthew formed his own company, Software Projects, *Manic Miner* was released for a third time, this time with a wonderfully abstract Roger Tissyman inlay. Gone was Willy himself, save for his trailing boot, as a bulbous telephone – no doubt inspired by Attack Of The Mutant Telephones – chases ▶

AS BEFITS THIS 8-BIT CLASSIC, IT HAS BEEN CONVERTED TO A WIDE RANGE OF FORMATS. HERE'S THE LOWDOWN ON THE 12 OFFICIAL VERSIONS OF MINER WILLY'S FIRST ADVENTURE



DRAGON 32/64

■ Playing in the higher resolution black and white mode, Dragon 32 *Manic Miner* nevertheless retains most of the game's ambiance and gameplay, and even manages to cram in an extra two screens: The Dragon Users Bonus and The End. It may be the only version of the game that lacks colour, but that shouldn't stop you from enjoying it. A very valiant attempt indeed.

ORIC 1

■ Amazingly, the Oric port of *Manic Miner* manages to out colour-clash the Spectrum. Beyond attribute issues, it's a decent stab at mining manically, with a slightly more cramped screen and a spooky rendition of Grieg's *In The Hall Of The Mountain King*. Boasting an extra dozen screens to the Spectrum original, it's one of the best Oric games out there.

GAME BOY ADVANCE

■ The brave explorer returned in 2002 for his very first handheld outing. The original game is presented with a graphical upgrade and Miner Willy's a lot sprightlier than he's ever been before, which certainly helps with timing jumps. This is a brilliant way to experience *Manic Miner* both old and new.

MSX

■ The MSX port, with its resonating tune and smart graphics, is one of our favourite 8-bit ports of *Manic Miner*. While it is essentially identical to look at, the superior power of the MSX computer gives this particular version of the game a chirpy edge, making it just as fun, if not more so than the Spectrum original. Be sure to give it a try.

SAM COUPE

■ Programmed by Matthew Holt and published by Revelation in 1992, this is a superb version of *Manic Miner*, unfairly consigned to a doomed computer. All of the original 20 levels are present, along with 20 new screens, there's a jaunty and catchy adaptation of the music and some fantastic cartoon graphics, most notably Willy himself.

MOBILE

■ In 2010, Elite brought *Manic Miner* to the iPhone with an Android version following two years later, and there have been numerous updates since, as well as the release of *Jet Set Willy*. While it remains graphically and sonically a faithful adaptation, the touch controls do let the game down, although it's still the easiest way to play *Manic Miner* on the go.

» [ZX Spectrum] A subtle difference from the corresponding Bug-Byte level: there's a little ghost in the lower left hand corner

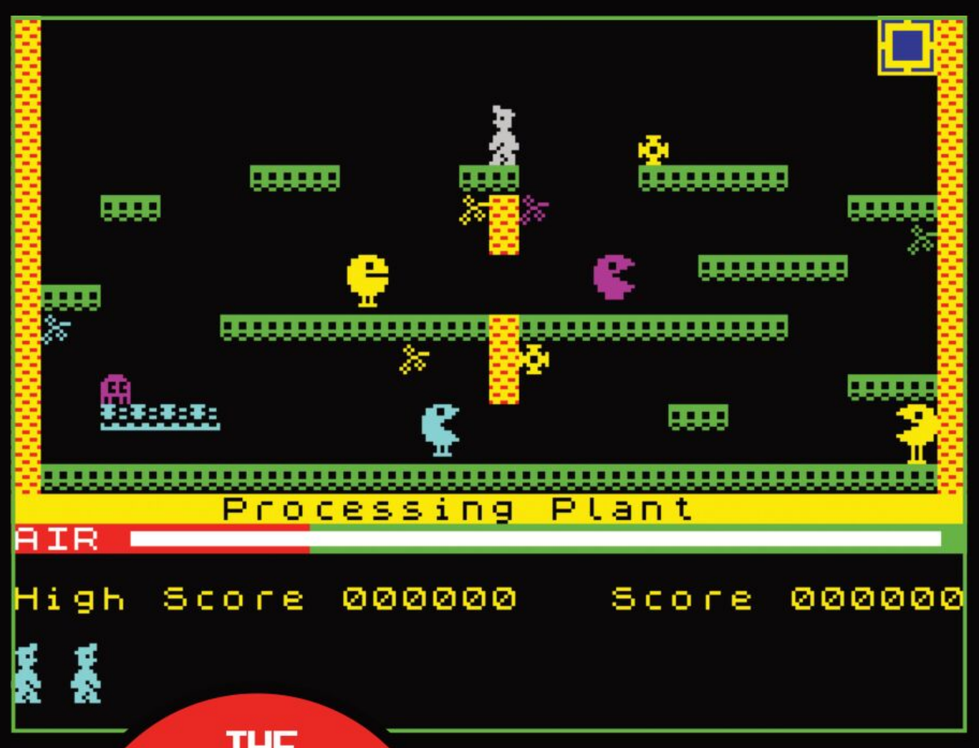
after him, its incongruous tongue salivating over the company's triangular logo. Finally, in 1989, Mastertronic issued this now-venerable marvel on its Mastertronic Added Dimension label, Roger Tissyman's cover topped with a new logo and budget price. Despite two changes in physical appearance and publisher, the game itself remained consistent, with the only notable alterations being some alternate amoebatrons, the Software Projects logo appearing in the Warehouse and a cheeky little ghost replacing a bush in the Processing Plant.

***anic Miner* gained effusive reviews upon release.** Under the strapline of "Penguins Make Life Perilous!" multi-format magazine *C&VG* declared the Spectrum game full of "humour, horror and wholesome addiction" before scoring it a solid nine out of ten. *Personal Computer News* went a step further, awarding Willy's first adventure a perfect score of five out of five. "The graphics and sound are both superb," concluded reviewer Mike Gerrard. "And I haven't enjoyed a game so much since I first encountered *Donkey Kong*." Awards followed, most notably the *C&VG* Golden Joystick for best Arcade Style game, and the game's author became an overnight celebrity. Having left Bug-Byte to form his own company, Software Projects, with Alan Maton, Matthew was soon busy working on the next dramatic episode in Miner Willy's life, *Jet Set Willy*. Yet while that huge and open world game also has its legions of fans, for many, it's the noble first explorative adventure of our fearless potholer that remains the most celebrated of his adventures.

While not the most original of videogames – *Manic Miner* owes a debt to the Atari game *Miner 2049er* – the verve and eccentricities of Matthew Smith's game helped cement its position as an illustrious standard-bearer for the ZX Spectrum. Each screen is a well-designed madness, but a test that can be planned for and overcome by a careful and cunning gamer. While subsequent games eclipsed it in terms of technical achievement, in 1983, *Manic Miner* presented a number of tricks and gameplay elements that were virtually unknown at the time. From the opening scene in the Central Cavern, accompanied by the chinking bars of *In The Hall Of The Mountain King*, through to the sun-drenched Final Barrier, it remains the ultimate test of a gamer's reflexes and patience, and a true 8-bit superstar. ✱

» [[ZX Spectrum] Miner Willy's encounter with Donkey Kong is shown here, and there's a switch to activate or not, depending on whether you wanted to kill the beast or let it escape.

» [ZX Spectrum] Collecting ten pence pieces in Attack Of The Mutant Telephones.



THE MINER FILES

■ The phones in Attack Of The Mutant Telephones are based on Matthew's own telephone, a BT 300 series model.

THE MINER FILES

■ The player has the option whether to kill the Kong beast in its two levels, making the only violence in the game a choice.

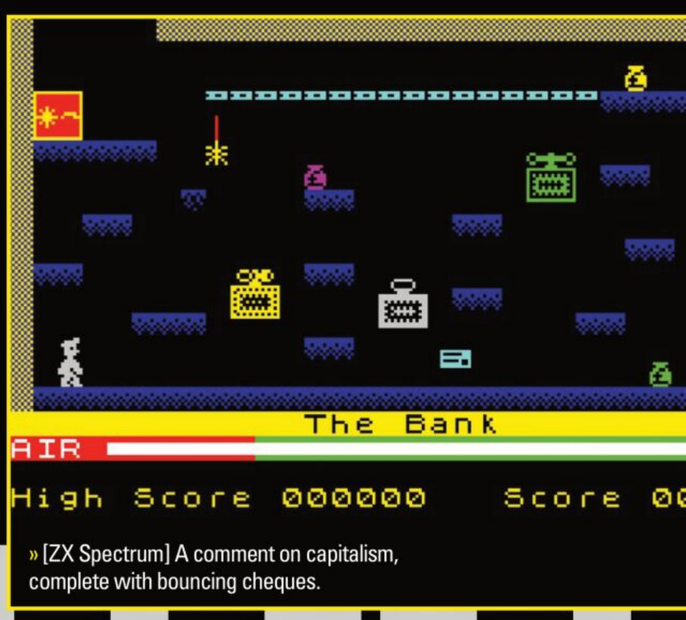
THE MINER FILES

■ In *Your Sinclair*'s final issue, *Manic Miner* featured at number 6 and 25 of the readers' and magazine's top 100 Spectrum lists.

"Matthew would show up at the office occasionally, although he didn't have much input on this port"
STEVE WETHERILL

» [ZX Spectrum] He's back! And he's meaner than before, as are the platforms.

» [ZX Spectrum] The stuff of nightmares… the air-sapping Solar Power Generator.

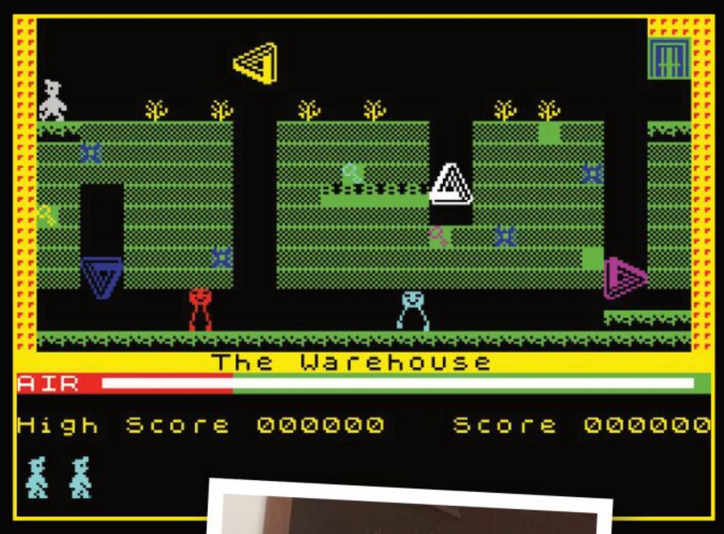


» [ZX Spectrum] A comment on capitalism, complete with bouncing cheques.

THE MINER FILES

- A third game in the series, *Miner Willy Meets The Taxman*, was announced, but never released.

SPIDER



DEVELOPER INTERVIEW

RETRO GAMER CHATS TO STEVE WETHERILL, PART OF THE TEAM BEHIND MANIC MINER'S AMSTRAD CPC CONVERSION

How did you come to work on *Manic Miner*?
I was nominally working on *Manic Miner* from the day I was hired. However, Software Projects couldn't figure out which platform. We looked at the Tatung Einstein, the Spectravideo and MSX, but for whatever reason they didn't get off the ground. When the Amstrad came out, tools and documentation were readily available and I was finally able, along with partner in crime, Derrick [Rowson] to get started. It was my first job in games.

Were you familiar with the Spectrum original?
Of course, and it was like a dream come true to work on *Manic Miner*. It was one of the first games I ever bought, although I don't believe I ever fully finished it without cheating. It's brutally difficult in places!

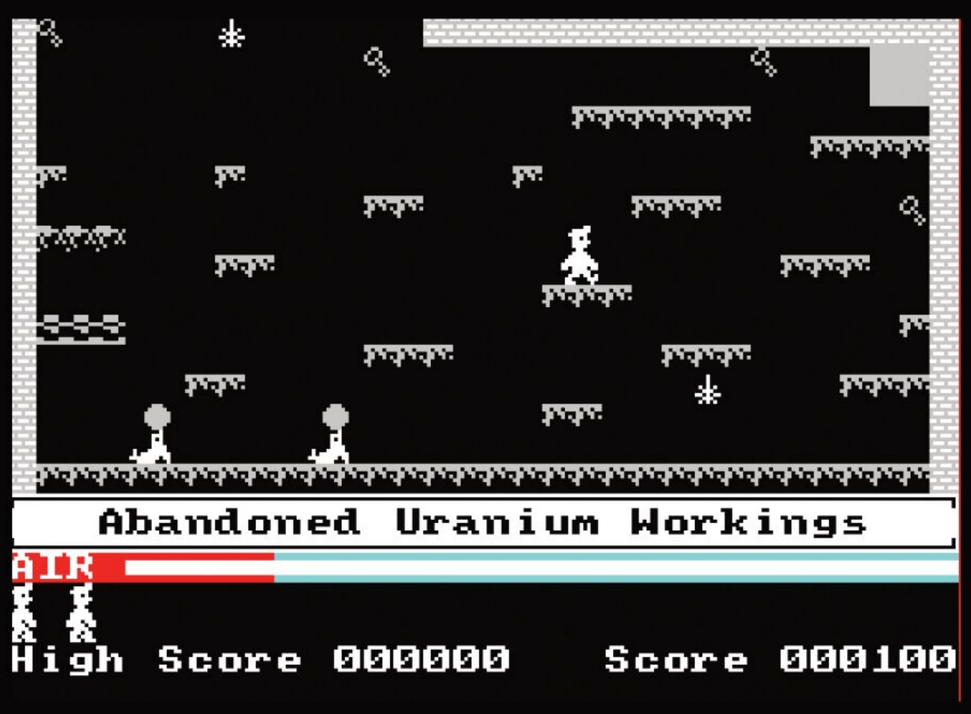
What was different in your version?
In a way, everything, because we wrote it from scratch. In some cases, we had to disassemble the original game to figure certain things out, but in general the goal was to do as accurate a conversion as possible. We spent a lot of time making sure that the gameplay was intact, with the pixel-perfect jumps – that was essential!

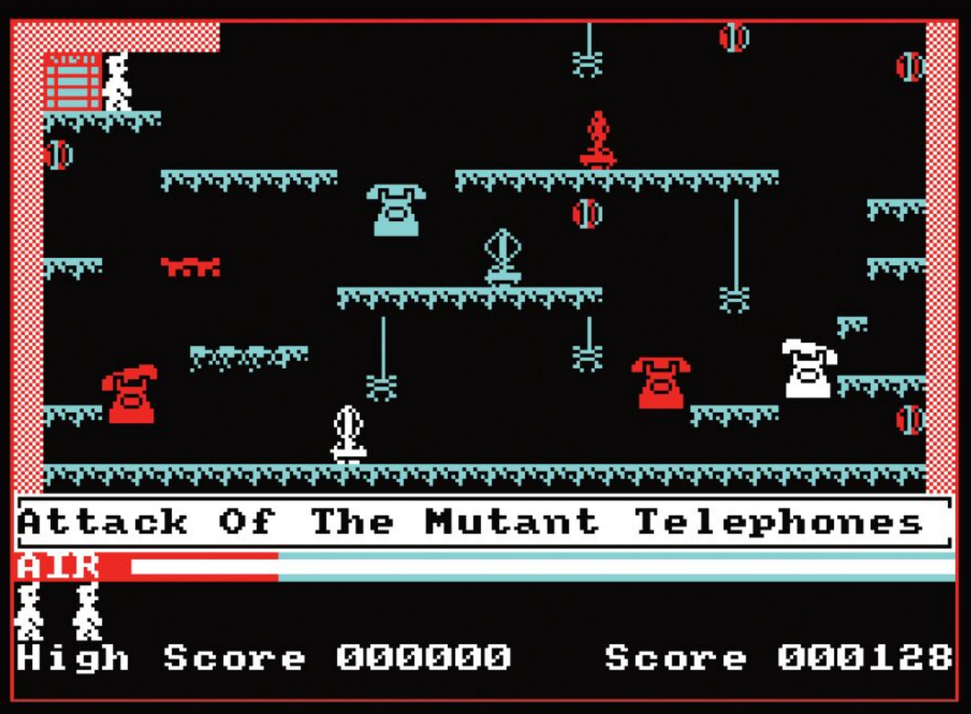
The Final Barrier screen is substantially different…
Honestly, I don't recall why. But if I had to guess, I'd say it was because that section would have taken less memory to store on the Spectrum due to the use of colour attributes, so we may have run out of space.

Was Matthew Smith involved at all?
Matthew would show up at the office occasionally, although he didn't have much input on this port. I think he has some criticism of the main title screen which used to say 'Amstrad CPC' and which he pointed out was kind of redundant. Other than that, I don't recall much input from him.

What did you try and improve?
Well the music is arguably better! Gotta love the Spectrum beeper, but the AY chip in the CPC made for a cleaner sound. The way the sprites were drawn was much more efficient than the original and we made use of some hardware features to avoid having two copy screens. That saved a lot of memory and increased performance. The original game had two off-screen copies of the screen used for composing the room and then erasing and redrawing all the sprites. When I first realised how it worked, I was amazed at how inefficient that approach was and that it didn't matter anyway. I think I agonised about performance too much in those early days.

Were you pleased with the final game?
Yes, and we went on to port – and significantly expand – *Jet Set Willy*, AKA *Jet Set Willy 2* when it was ported back to the Speccy. And, since this was my first commercial game, that was something very cool to have under your belt.





Missile Command

NIGHTMARE FUEL

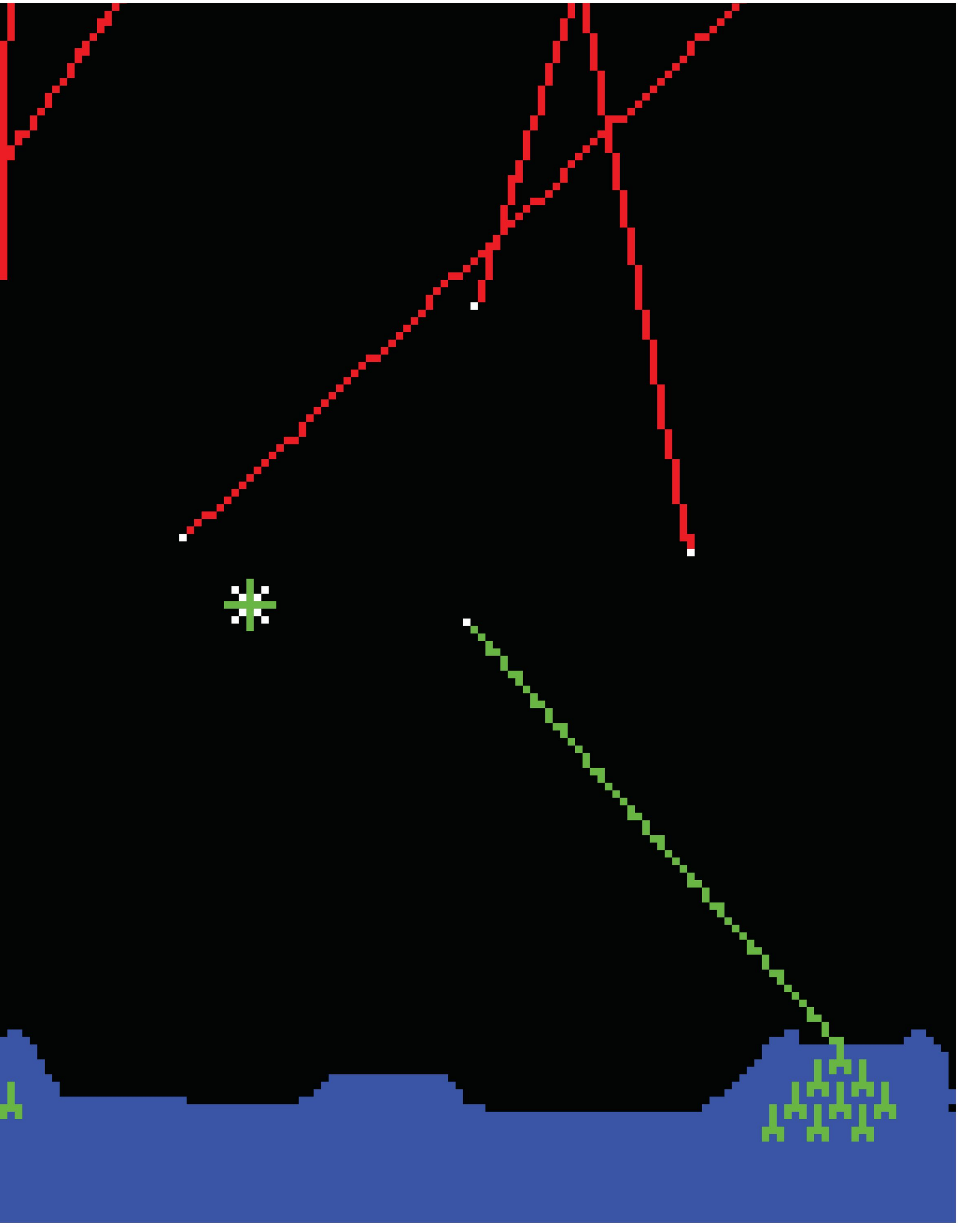
» ARCADE » 1980 » ATARI INC

Dave Theurer, the creator of such arcade hits as *Tempest* and *I, Robot* is a very busy man. I had been trying to get him to agree to an interview about *Missile Command* for years and when he eventually agreed it was on the proviso that I spoke to him for the 15-odd minutes that he took to drive the freeway to work. Fearing this wouldn't be enough time to get what I needed and that it would be too noisy we rescheduled for a more suitable time.

It took around eight years to eventually sort out an interview (which you can read in issue 88) and it probably wouldn't have happened at all if it wasn't for long-time freelancer, Paul Drury. He had built up a good rapport with Dave, as he would regularly travel to the States once a year in order to visit Florida's famous Funland arcade. His connection, not only made it easier to interview Dave, but also led to me interviewing Rich Adam, who was a junior programmer on the iconic game.

Anyway, the reason I'm sharing this with you is because I have recently read Tony Temple's excellent book, *Missile Commander*, which not only covers his success in becoming the Guinness record holder of *Missile Command*, but also looks at the game's creation. Like myself, Tony has a huge respect for Dave's game, but he can also display that respect by being incredible at *Missile Command*, as well and writing a book about it (I settled for a four-page feature instead).

While I've no interest in ever wanting to beat Tony's high score, reading *Missile Commander* did make me return to the game, and while I'm appallingly bad at it, I still love its tight design and clever points system. I'm less enamoured by how it stirs up long-forgotten memories of being a child in the Eighties and being terrified of nuclear war-based films like *Threads* and *When The Wind Blows*, but those very same fears of potential nuclear war were also shared by Dave while he was making the game, which led to hellish nightmares, but also an incredible arcade experience that still gives me thrills (and chills) today. ✱



THE EVOLUTION OF THE LAST NINJA

The Last Ninja was influenced by Ultimate's adventures, Bruce Lee and International Karate, and it subsequently inspired a series of hit follow-ups. System 3 founder/designer Mark Cale explains how his combat-based arcade adventure evolved

WORDS BY RORY MILNE

Many of the great UK games developers of the Eighties were synonymous with just one home computer. Ultimate favoured the Spectrum, and while System 3's Mark Cale respected the firm's arcade adventures, he remembers thinking that he could better them with a Commodore 64 title that combined puzzle-solving and martial arts. "Some of the most successful games where you went around solving puzzles – in particular those from Ultimate – weren't quite graphical enough," Mark considers, "so what I really wanted was to have beautiful graphics combined with adventure elements. Guns had been done to death, and we had been very successful with *International Karate*, so we wanted to have combat with a variety of weapons, and put that into a feudal Japan environment."

Having chosen an ancient Far East setting for his adventure, Mark named it *The Last Ninja* – after making its ninja hero the last of a clan.

MARK CALE

» It's surely only a matter of time before System 3 founder Mark Cale revives *The Last Ninja* franchise.

He then devised level designs with the same structure as the movies of a martial arts master. "Bruce Lee films like *The Big Boss* were like Japanese games," Mark points out, "where you went through a level and had a boss at the end. So that was why I chose to do what I did when I designed *The Last Ninja*. Datasoft's *Bruce Lee* game was an all-time favourite of mine, but we didn't want a side-on platform game, because I just thought puzzle games worked so well in an isometric view."

The puzzles Mark designed for *The Last Ninja* were based on finding items to overcome obstacles, but he felt the objects would get lost in the game's intricate and ornate backgrounds. "I thought if we had hid the items people would have never found them," Mark reasons, "so we had to design something that made it a little bit easier for the player to find them and work out what they were. There was a big battle with that, because my programmer John Twiddy didn't want them flashing, but I said that people would give up looking otherwise."

» [C64] The various weapons in *The Last Ninja* include shuriken, nunchucks and bamboo staffs.

Further pointers to solving *The Last Ninja*'s puzzles followed, in the form of water fountains and Buddha statues that told players which object to look for next. "I liked the idea of giving respect to the Buddha statue, which would then reveal things to you," Mark enthuses. "As you went up to it you would kneel, and it would reward you. That was influenced by the fact that in a lot of Japanese temples you prayed and rang a bell and put money in as a courtesy."

> "We wanted to have combat with a variety of weapons, and put that into a feudal Japan environment"
> MARK CALE ON THE LAST NINJA

The design for *The Last Ninja* wasn't entirely realistic, however, in so much as it incorporated monsters, animated skeletons and ghosts. "The game wasn't *accurately* based on Japan," Mark notes. "We *did* take on the idea of ninjutsu, but we also put fantasy in there by creating mythical creatures. I just felt that we didn't want to just have different guys fighting; we wanted to put in some creatures to make the adventure a little bit more appealing and a little more mystical."

As well as giving variety, some of *The Last Ninja*'s mythical monsters also acted as bosses, which Mark dotted throughout his design. "We looked to China and the wider Far East for the dragons and sea serpents, because they suited the content of the game," Mark recollects. "The dragon that you had to get the sleeping potion to defeat was also about having bosses at certain stages of the levels. So it was going back to *The Big Boss* again – you had to have a major character or event that would try to stop you."

But compared to its bosses, other aspects of Mark's project proved impossible to implement, and so its stepping stone challenges were made tests of precision. "The rivers and swamps were always part of the game," Mark acknowledges, "but they weren't designed to be *that* challenging. I wanted players to jump on certain rocks, and if they didn't move on quickly enough they would sink down or a water dragon would get them. But the way that the artists set things out that wasn't

» [C64] Praying to Buddha statues in *The Last Ninja* reveals which items to look for.

» [C64] There are a host of otherworldly opponents in *The Last Ninja*, including animated skeletons.

STAGES OF EVOLUTION: OBJECT LESSON

FROM APPLES AND CACTI TO FINDING EVIDENCE AND FORGING KEYS

THE LAST NINJA

When you're playing *The Last Ninja* it's worth remembering the old adage that an apple a day keeps the doctor away, as the apples in the game restore lost lives. You also have to find certain items to solve puzzles, and there are challenges that require specific tools and equipment.

TUSKER

Tusker's puzzles are based around finding and using objects in less than obvious ways, so as well as trial and error you need some general knowledge. For example, to get water in the desert you have to cut open a cactus with a knife and fill a bottle with the water that spills out.

VENDETTA

You need to find items in *Vendetta* to overcome challenges – like wire cutters to defuse a bomb. But you also have to collect evidence of the kidnapping you're trying to foil. As well as video of the crime, you have to find personal belongings that have been left behind by the victim.

LAST NINJA 3

The way to approach *Last Ninja 3*'s puzzles is to be creative. A climb up a sheer cliff requires a firm grip, but gloves alone aren't enough, so you add steel talons. Or you need a key, so you find a mould and a metal ingot, and then look for a fireplace that you can forge a key in.

STAGES OF EVOLUTION:

MORTAL COMBAT

HOW FISTS AND NUNCHUCKS LED TO SLINGSHOTS AND UZIS

THE LAST NINJA

You begin your mission with no weapons, but with practice you should be able to stealthily run past opponents rather than potentially taking damage in unarmed combat. A sword and nunchucks can be found early on in the game, and these are probably the game's most effective weapons.

TUSKER

Whether or not *Tusker* was influenced by *Indiana Jones*, there's a definite feel of the movie when you're playing the game – although the hero doesn't use a bullwhip. The weapons that *are* in the game include a knife, a gun (which you need to find ammo for), a machete and a slingshot.

VENDETTA

The weapons in *Vendetta* are more of a necessity than an option. The game's enemies are armed to the teeth, and while its hero is a skilled hand-to-hand fighter he's not bulletproof. Luckily, there are Kalashnikovs and Uzis to be found, although ammo is scarce so every shot counts.

» [C64] Unlike its predecessor, *Last Ninja 2* has stationary enemies with long-range attacks.

» [C64] It pays to explore in *Last Ninja 2*, there are even nunchucks hidden in a toilet!

▶ possible, and I had huge rows with John Twiddy, because I thought it was ridiculous to have things pixel-perfect."

In spite of its daunting physical challenges, *The Last Ninja* was lauded by reviewers when it came out and soon topped the sales charts. Mark moved the inevitable sequel to the present day, and from Japan to the US. "New York was an iconic city with very distinctive features," Mark reflects, "so there was a lot you could do with that in a game. And if you looked at *Highlander*, he started in Scotland in the past, and then he was in America in the present day – because people identified with modern-day America. It was the same principle with *Last Ninja 2*."

Other changes that the follow-up made to *The Last Ninja* formula included a greater emphasis on exploration, where items were hidden in bins and other unlikely places. "Well the nunchucks in the toilet was an obvious puzzle, because you used to flush an English toilet by pulling a long chain with a wooden handle!" Mark laughs. "So that one was obvious! I think people had also become used to *The Last Ninja*, so we wanted to slightly change things for the sequel. It was really just the next phase in developing the series."

Another aspect of the sequel differed from its predecessor simply because of its modern-day setting, in so much as Mark's design traded mythology for technology. "We were a bit limited with the mythical side for *Last Ninja 2*," Mark concedes, "so there were more grounded characters like the alligator in the sewer. It was a little bit different from *The Last Ninja* and the freedom we had there, but then we could use things that we couldn't have in the first game, like the helicopter. So we used that as a big element that helped you progress, and other things that were in the present day."

Additional improvements over the original came in the form of seemingly harmless bystanders concealing ranged weapons, like juggling street performers and first-floor apartment dwellers. "Someone throwing something out of a window at you was just something different than having guys to fight on every screen," Mark explains. "It was also something that you had to be aware of and that you had to learn as you were playing your way through the game. I think that came from the archer and the blood at the end of *The Last Ninja*. That was where we started doing that sort of thing, and it was a progression from there."

A progression of an entirely different kind was seen as essential, and so *Last Ninja 2*

» [C64] New York was picked as *Last Ninja 2*'s setting because of its globally recognisable features.

» [C64] Instead of mythical creatures like the original, *Last Ninja 2* has modern-day equivalents like alligators.

» [C64] Essentially an enhanced *Last Ninja 2*, *Last Ninja Remix* has nicer surrounds and a cinematic intro.

"New York was an iconic city with very distinctive features, so there was a lot you could do with that in the game"

MARK CALE ON LAST NINJA 2

left the stepping stones of the original behind in favour of boats floating down streams. "The feedback from a lot of the reviews – and everyone else – was that the challenges in *The Last Ninja* were a really shit idea, 'Why had we made it pixel-perfect to get over a fucking rock?'," Mark paraphrases. "So we based the challenges in *Last Ninja 2* around a boat, and made that easier to jump on – but it was moving! So that was the challenge, it was a moving object. And it was fairer, because it was a timing challenge."

Last Ninja 2's less demanding challenges, modern-day locations and fresh mechanics were duly noted by excited reviewers on its release, and the follow-up went on to outsell its predecessor. But instead of a third ninja game, Mark's next design – *Tusker* – featured an intrepid explorer. "I had this whole suite of ideas in my mind for what type of games to do; I wanted *different* games and *different* gameplay styles," Mark recalls. "I think the concept of the elephants' graveyard in *Tusker* was great, but I felt the game's puzzles weren't obvious enough. I just didn't like the fact that everything was so subtle." Like *The Last Ninja*'s stepping stones, but on a grander scale, *Tusker*'s puzzles were designed to be intuitive but became overly challenging during the game's prolonged development. "The programmers thought that people would finish the game too quickly, so they made it difficult just for the sake of it," Mark sighs. "To me, that didn't make a game play. Otherwise, *Tusker* could have been a lot bigger than it was. I think there was also an element where a lot of my team just wanted to keep doing ninja games."

Despite Mark's reservations, *Tusker* reviewed well, and so rather than revisit *The Last Ninja* with his next arcade adventure he devised an action hero title called *Vendetta*, where items were used as evidence as well as to solve puzzles. "It was to try to fit everything together," Mark says of *Vendetta*'s innovative use of objects. "We wanted *Vendetta* to be more of a secret agent thing, so that's why we went in that direction. The other nice thing about the game – which I think we could have made more of – was picking up guns, because we had moved away from swords. A lot of the cinematic parts were because I had artists like Tony Hagar and Dokk working with me at that time, and they did some fantastic work."

But as novel as *Vendetta*'s shoot-'em-up elements, evidence collection and cinematic intro were, it differentiated itself from the *Last Ninja* games most with its combat driving stages. "Although *Vendetta* took elements from *The Last Ninja* and its isometric view, we also put in the idea of driving from each location to the next to take it a stage further," Mark reviews. "We wanted to have two game types in one. So you had an isometric adventure, and obviously you had the skill element of getting to the next level. That just made it a bit different to what other people were doing."

» [C64] The puzzles in *Vendetta* are more obvious than *Tusker*'s, but they're still quite sophisticated.

» [C64] Like *The Last Ninja*, *Tusker* has its share of monstrous myth-based bosses that guard a level's end.

» [C64] Fighting armed foes with your fists in *Last Ninja 3* builds up Bushido, which helps in boss fights.

» [C64] *Last Ninja 3*'s statues are just as useful as the ones in the original game.

> "You had to power-up your abilities, and once you had your Bushido indicator at full power it made it easier to take on the boss"
>
> MARK CALE ON THE LAST NINJA

» [C64] The floating lily pad in *Last Ninja 3* behaves similarly to the boats in *Last Ninja 2*.

▶ *Vendetta*'s sky-high ratings when it was reviewed proved that its point of difference had paid off, and Mark later continued this approach when re-releasing *Last Ninja 2*. "A lot of companies would re-release games, and we wanted to re-release some of ours, but also *remix* them with unique graphics and a nice intro," Mark says. "*Last Ninja Remix* was also to coincide with the C64 GS console coming out, so we could put a *Last Ninja* game straight on there, but remix it so it was a little different for someone who had bought a C64 GS and already had *Last Ninja 2* for the C64."

The almost perfect review scores for *Last Ninja Remix* helped make the case for a third *Last Ninja* title, although this was already well underway.

Mark hoped a dynamic approach to bosses would help *Last Ninja 3* meet its audience's expectations. "*Last Ninja 3* was right at the end of the 8-bit era, and people were asking for more and more sophistication," Mark remembers. "We also wanted to keep the theme of bosses. So you were trying to take on a shogun that had ultimate mystical power in the *sixth* dimension, there were *six* levels, and the *six* bosses were different incarnations of the shogun. It wasn't obvious enough, but that gave you 666."

Backstory aside, the mechanics of *Last Ninja 3*'s boss fights were a step up from its predecessors, in that the 'Bushido' that helped you beat bosses was gained by fighting many minions using superior weapons or fewer minions using inferior weapons. "Bushido is all about honour and fighting," Mark observes, "and it was all there in what we were trying to do. But again, I think it was lost on a lot of people. We wanted to make the combat more than just 'tap, tap, tap'. So you had to power-up your abilities by achieving certain tasks, and

» [C64] The final confrontation with the shogun in *Last Ninja 3* requires power and Bushido.

then once you had your Bushido indicator at full power it made it easier to take on the boss at the end of the level."

Another major innovation related to *Last Ninja 3*'s puzzles, where rather than lock and key challenges like the previous games, players had to bring multiple items together. "The puzzles weren't straightforward enough all of the time," Mark feels, "and that made the game a little bit more frustrating for people. Yeah, OK, it seemed obvious to get a combination of things together to make something that you could use. But I think that when things became too challenging you turned off the mass market, and at times *Last Ninja 3* was a little bit too challenging for some people."

By comparison, the floating wooden boards on the *Last Ninja 3*'s lava lake posed far less of a challenge, but only once you realised not to use them to cross the lava. "The wooden boards were a homage to *The Last Ninja*'s stepping stones – but they were a piss take!" Mark grins. "You could just jump over the narrow bit of the lava, but the idea was that most people wouldn't. They'd think they had to jump onto the boards, and wouldn't try jumping over the narrow bit. So it was there to carry that whole idea through the series, and because I was so fucked off with John about those stepping stones!" When asked about a fourth *Last Ninja* title, Mark seems enthusiastic about the idea, and offers a compelling argument for keeping the series in isometric. "We've had a number of attempts to do it," Mark admits. "We even tried third-person on the PS2, but I wasn't satisfied with it, so I canned it in the end. But we could certainly do it justice now. I think you would have to do a whole world in isometric, where you could zoom in and change your view."

On reviewing the line of arcade adventures that began with *The Last Ninja*, Mark sounds like a proud father, and he concludes by drawing attention to the staggering number of C64 gamers who owned at least one *Last Ninja* title. "I'm immensely proud to have produced and created *The Last Ninja*, and we have a lot of fond memories of the *Last Ninja* games," Mark beams. "In terms of sales, they were far bigger than *Tusker* or *Vendetta*. *The Last Ninja* and *Last Ninja 2* were distributed by Activision, and the sales of *Last Ninja 1*, *2* and *3* on the C64 were over 23 million copies. That's quite incredible, because Commodore only sold just over 20 million machines in total." *

STAGES OF EVOLUTION: LEAPS OF FAITH

STEPPING STONES, FLOATING BOATS, GAPING CHASMS AND LAVA LAKES

THE LAST NINJA

There's a learning curve to *The Last Ninja*, in that you have to learn to fight and pick items up, but the game's physical challenges are much more challenging. The issue is that its rivers and swamps are crossed using stepping stones, and each step requires pixel-perfect precision.

LAST NINJA 2

The unenthusiastic response to *The Last Ninja*'s stepping stones was duly noted, and so in *Last Ninja 2* you jump into and out of fast moving boats instead. This is far less frustrating than leaping from stone to stone, simply because it's a test of timing rather than precise positioning.

TUSKER

There's no jumping in *Tusker*. Maybe its developers were scarred by *The Last Ninja*'s stepping stones! However, there's a gaping chasm in the game's finale, and no way to leap over it. The solution, of course, is to walk over a plank of wood. If only that was an option in its predecessor!

LAST NINJA 3

It's fair to assume that *Last Ninja 3*'s wooden board stepping stones over lava are a call back to the original, and in a way they are. The twist being that they can be ignored in favour of leaping the lava at its narrowest, which is funny if you haven't spent ages using the boards.

Neo Geo Pocket fact

■ Though the Neo Geo Pocket was only sold at retail in Japan, English language variants of the black and white games were sold online. These are now highly prized by collectors for their rarity.

PROCESSORS: 16-BIT TOSHIBA TLCS-900H CPU (6.144MHZ), 8-BIT Z80 SOUND CPU (3.072MHZ)

RAM: 12KB MAIN MEMORY, 4KB Z80 MEMORY

GRAPHICS: 160X152 RESOLUTION, UP TO 64 SPRITES ON SCREEN, 8 SHADES OF GREY

AUDIO: T6W28 TEXAS INSTRUMENTS SN76489 VARIANT (3 SQUARE WAVE CHANNELS PLUS NOISE GENERATOR, WITH DIRECT DAC ACCESS)

OPERATING SYSTEM: 64KB NEO GEO POCKET BIOS ROM

MEDIA: ROM CARTRIDGE (UP TO 4MB)

Neo Geo Pocket

» **MANUFACTURER:** SNK » **YEAR: 1998**
» **COST:** ¥7,800 (launch), £56+ (today, boxed), £49+ (today, unboxed)

While SNK may have been something of an unexpected entrant into the handheld console market during the late Nineties, its hardware had plenty going for it. The Neo Geo Pocket was comfortable to use, thanks to its wide form factor and magnificent microswitched thumb stick. The console was also able to boast exceptional battery life, despite hosting a 16-bit CPU that enabled the console to run some intriguing original games as well as surprisingly faithful versions of SNK's arcade hits. With *Samurai Shodown*, *Baseball Stars* and *The King Of Fighters* all making their way to the platform within its early months, cult favourite status was assured. Or rather, it should have been.

The one thing that the Neo Geo Pocket didn't have going for it was a colour display – a fatal flaw for a system that was released just one week after Nintendo introduced the Game Boy Color. SNK's engineers quickly returned to the drawing board and less than five months later, the company introduced the Neo Geo Pocket Color. Only ten games were released exclusively for the black and white model, but many games for the Neo Geo Pocket Color were backwards compatible with the older machine. ✱

SYSTEM SUPPLIED BY
EVAN AMOS

ESSENTIAL GAME
The King Of Fighters R-1

The library of Neo Geo Pocket games without colour support is incredibly small, and some of those were later upgraded. *The King Of Fighters R-1* never was, which is something of a shame because it's an excellent miniaturisation of *The King Of Fighters '97*. The expressive chibi sprites set a standard that later Neo Geo Pocket games would follow, and the backgrounds are very detailed in spite of the display's limitations. All of this would be for nothing if the game design didn't hold up, but SNK did a great job of adjusting a four-button control scheme for two buttons.

THE RETRO GAMER GUIDE TO

TIM SCHAFER & DOUBLE FINE

Looking back over the credits and contributions of a gaming great in his own words

WORDS BY JONATHAN GORDON

Tim Schafer has had an incredible career in videogames and his company, Double Fine, recently celebrated its 20th anniversary, which is an exceptional achievement that deserves to be celebrated in its own right (look out for a more in-depth feature later this year).

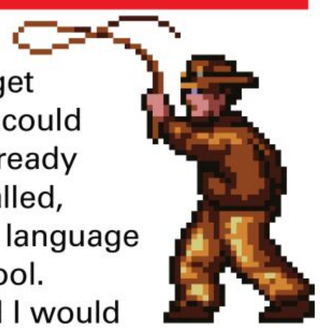
The following eight pages will look at many of the games that Tim has worked on throughout his tenure in videogame development, from his early work as a (sort of) tester, to the titles he now creatively oversees at Double Fine.

The Secret Of Monkey Island, *Full Throttle*, *Grim Fandango* and *Psychonauts* are just a few of the critically acclaimed games that helped cement Tim's reputation in and beyond LucasArts, and highlighted just how diverse (and hilariously funny) videogames could be.

So join Tim in this classic feature as he talks about the challenges of making videogames across 30 years. You'll discover that beyond simply designing and writing games he's worn all sorts of different hats, including directing, voice acting and more. It's a legacy to be proud of.

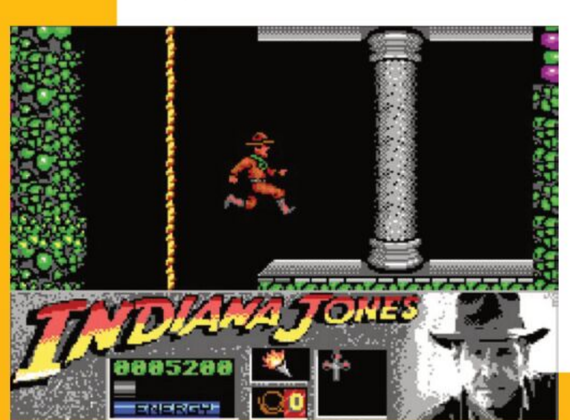
INDIANA JONES AND THE LAST CRUSADE: THE ACTION GAME 1989

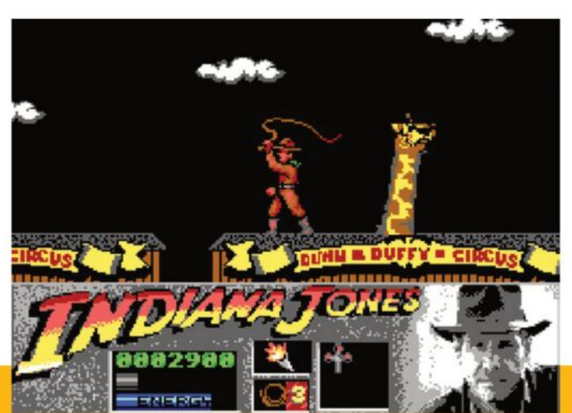
TESTER (SORT OF)



I studied creative writing and computer science in college, and then I just happened to get that job at Lucas looking for programmers who could write, but they hired us, and they weren't quite ready for us to work yet. They hired four, what they called, SCUMMlets, which are people who can use the language SCUMM, which is the internal house scripting tool.

So I started as a tester, I had a time sheet and I would be there all night. I remember I found a crash bug if you jumped off the tiles that spelled 'Jehovah', and I walked into the room to tell them all, and they looked at me like, "Jerk." So saying that I worked on that game is a stretch, because it was only a few nights. But I was hired as a programmer. It would be dishonest to say that I started as a tester.





THE SECRET OF MONKEY ISLAND 1990

WRITER, DESIGNER

We first had SCUMM university, which was where we learned how to use SCUMM. People like Steve Purcell worked there doing art and would give us some *Sam & Max* art that he'd made, long before he made a *Sam & Max* game. We were just playing with that and learning how it works and Ron [Gilbert] would come up and teach us every day something new, they would come and check on our progress, and I think he was observing us and seeing what our styles were, because he then chose Dave Grossman and I to work with him on *The Secret Of Monkey Island*. He pitched the game to us, and we got to brainstorm with him and try to help with the puzzles. He had a kind of puzzle flow diagram, he had the story and stuff for the game, and then I started writing dialogue for it.

It was always going to be a comedy, it was always a funny game, but I thought my dialogue was temporary because I wasn't writing with any pirate lore or in mannered pirate language. I was just writing in my own voice and so was Dave, we were just cracking jokes, and then Ron was like, "No, this is the game. This is what it's going to sound like." And I was like, "What!?" But I think that creatively helped me a lot because if you can take the pressure off and pretend that you're not writing final dialogue then you can just let your creativity flow a little more.

Then who keeps up the law and maintains order?
Then who eats the donuts and roughs-up the transients?
Please! Not in my new coat!
OK, put me down now and I won't have to hurt you.

MONKEY ISLAND 2: LECHUCK'S REVENGE 1991

WRITER, DESIGNER

I remember we just ploughed right into *Monkey Island 2*. I think maybe Ron knew we just had to get started before management started asking too many questions. And that worked. I think the first game only took about nine months to make, which seems crazy now. The next game maybe took a little bit more; about a year maybe. Those were really special times, especially working at the [Lucas] Ranch in this incredible environment that was set up just to make creative people relaxed and comfortable. It was a fun environment with Ron and Dave and Steve Purcell and Mike Ebert and Bucky [Martin 'Bucky' Cameron] and all these people were so fun to work with. Getting that job right out of college was a really lucky break for me, and I'm glad I was ready for exactly that job description.

MANIAC MANSION: DAY OF THE TENTACLE 1993

DIRECTOR, PRODUCER, DESIGNER, WRITER

■ It was a little bit like what I imagine it would be in movies and TV when you become a made man, Ron was kind of like the boss who is like, "Dave and Tim are ready. They're made." I had never had to run a project; Dave and I both sat and thought, and that's one of the hardest things to do: come up with an idea. What do you want to do? We were just kind of stunned. Then Ron was like, "Do you guys want to make a sequel to *Mansion*?" He had a little five-page doc about time travel and the basic idea of the toxic sludge, and we were like, "Yes!" because we were so terrified of having to come up with our own. And Dave's a great writer and a great brainstormer.

It was inspired by Chuck Jones cartoons, and we got to meet him and show him the game. We set up a meeting with Chuck, and got him a hotel room in the city because he was there for some show and showed him the game. We were just hoping he would say something nice that we could use as a blurb on the box. But the only thing that he really said was, "Why did you bring me here?" But he liked the game and he tried to recruit our background artist afterwards, so we took that as a good sign.

FULL THROTTLE 1995

DIRECTOR, WRITER, DESIGNER

■ Dave would eventually go off and join Ron at Humongous Entertainment, and I had that blank page problem of what do I do next? I pitched a bunch of games – I had a pitch document of about five different games. There was a sequel to *Monkey Island* and a sequel to *Day Of The Tentacle*, because they asked for that, and I did a day of the dead pitch, a spy game and a biker game. They were like, "Do you want to make any of these? Which one do you want to make? Commit to something!" I was like, "OK, the biker game." They were worried that it would be too much about killing people and selling drugs, and I was like, "No! Of course not", because I didn't know anything about real bikers really. But I had read Hunter S Thompson books about it, and watched a lot of movies, and I wanted to do a story about a different kind of character than we had done before. We had done these loveable losers like Guybrush or Bernard Bernoulli, and it was like, "What about if it was someone who is cooler and tougher than you are? Would that be fun to control and drive around?" So that was a whole different vision for Ben [the game's lead character].

GRIM FANDANGO 1998

DIRECTOR, WRITER, PROGRAMMER

■ That one sat around for a little while as just 'the day of the dead game', and someone was finally like, "What are you going to do with this day of the dead game? It's about a skeleton that does… what?" I just happened to have been watching a ton of film noir movies at the time, and I love Humphrey Bogart. There were all these interesting stories in my research, reading up a lot about Mexican folklore and the idea that when you go to the land of the dead they would put bags of gold on your coffin and on your chest to spend in the land of the dead, which is like, "Do you really need money when you're dead?" They would also put gold in the lining of the coffin to hide it from grave robbers, but also from dishonest souls in the land of the dead who might rob it from you. Just the idea that you had to worry about such trivial, petty crimes when you're dead seemed so crazy, but also really fun too. So that's where *Grim Fandango* came from.

DOUBLE FINE THE PUBLISHER

THE FAMILY KEEPS GETTING BIGGER

As Double Fine looked to expand its horizons and try making games with smaller teams, the question of what the company stood for was raised. "Back then we picked personality and charm and a labour of love, that these things had to have a feeling that someone really put their heart and soul into them; that's what makes them Double Fine," founder and creative director Tim Schafer tells us.

And it's that criteria that has drawn them to their releases so far. "I think you can see with the Double Fine Presents games, which are selected by Greg [Rice], the question of a Double Fine game being about personality, charm and a labour of love are still true for those games too." Here are some highlights so far.

140

2016

This minimalistic platformer had already been released on PC, but Double Fine picked it up to release it for consoles. Developed by Jeppe Carlsen, who worked as gameplay director on *Limbo*, it is a thoroughly engrossing and colourful experience, with synchronised music mixing well with the gameplay.

EVERYTHING

2017

From the creator of *Mountain* (also supported by Double Fine) David OReilly, *Everything* is a wonderfully trippy exploration of the connection between all living things as you zoom in and out of objects from a galactic view to the atomic level and everything else in-between.

PSYCHONAUTS 2005

CREATIVE DIRECTOR, WRITER, DESIGNER

I always wanted to make a spy game because I really liked *Three Days Of The Condor*, the Robert Redford movie. Then it kind of morphed into a space-spy game, and it was going to be this crazy mix of *Shaft* and *2001* that I always wanted to do. But after trying to get that made for a year, I started to have the revelation that one, I wanted to start to own what I made, and secondly, I wanted to have flexibility with the team and the culture of the team, and build that to be more representative of what I saw in my own *Grim Fandango* team. At a larger company you can't control the culture and the priorities of it and be flexible with employees if they want to work three days a week and stuff like that, so I wanted to set up something new. So we left with a couple of people from the programming team, and started Double Fine.

Some elements of the spy game were like going into your own mind as a kind of meditation. You would meditate on an object in order to find a clue about it, and you would go into your mind to find all of these different things. Then someone was like, "Tell me about that game where you go into other people's minds", and I was like, "No, you go into your own mind… but wait a second! That's so much better" [laughs]. So sometimes creativity comes from misunderstandings.

I took it around to everybody, and luckily for me the Xbox had just launched, and they wanted to push games as something new. Ed Fries (Microsoft's VP of games at the time) would talk about games as art a lot, which is something that I thought was really important, and we hit it off and signed that game with Microsoft. Then he left Microsoft, and they cancelled all of his games. That was unfortunate for us, and kind of our lowest point. I at one point had a talk with the team that the next pay cheque was the last one, and that they could use our computers to put their resumes together, and then Majesco picked us up and signed us, and we got to finish the game.

The team was so dedicated, we believed in what we were making so much, and we had fought so hard just for the right for it to exist. The team crunched really hard, it was amazing because nobody quit, and it was a really horrible crunch. We decided to never crunch again, so we try not to. But we were really happy with the game, and we loved the game when it came out, and obviously we're making a sequel to it now. There's something about that world that we like and players like.

BRÜTAL LEGEND 2009

CREATIVE DIRECTOR, WRITER

I always thought of these games like *Neverwinter Nights* that we were up against were these really high fantasy things that we don't want to make, but if I were to make one I would want it to be more extreme than all of those. What's an even more *Neverwinter Nights* name than 'Neverwinter Nights'? We can get more and more ridiculous, and eventually it came to me, sitting on a bus, driving through Marin: *Brütal Legend*. And I felt, "Yes, that's the most extreme fantasy name I can think of."

Then I also had a secret love for RTS games, especially the first *Warcraft* and *Herzog Zwei* before that, which was a Sega Genesis game. People said you couldn't do a RTS on consoles because of cursors being annoying to push around with a thumb stick, like in *Starcraft 64*. But in *Herzog Zwei* your avatar is your cursor, your little jet is your cursor, and I thought that was a natural thing to do. Also, the story I thought would be a screenplay about a roadie going back in time to King Arthur's court and using his roadie skills to do medieval combat using Duct tape and all that stuff. The two ideas bumped in my head, and I thought the roadie could be a heavy metal roadie, and the heavy metal imagery overlaps with these demon hotrods I wanted to make. I forgot to mention the RTS game I wanted to make was all about demons and hotrods, like Big Daddy Roth.

That title, story and gameplay mechanic all just crashed together, I got to make this dream game that I had been wanting to make for years, and got so much support from first Vivendi and then EA. It was a dream come true, as I got to meet Ozzy Osbourne, and I even got to meet Lemmy, Rob Halfrod, Dio and all those people who were my idols, and I got to put all of that music in the game and implement all of these videos I had seen in my head as I was driving my car listening to metal.

If I had infinite money, one of the things I would love to do is just hang out in that world and make more content for it. Just keep making missions for it, and make more multiplayer modes and stuff like that. ▶

GNOG

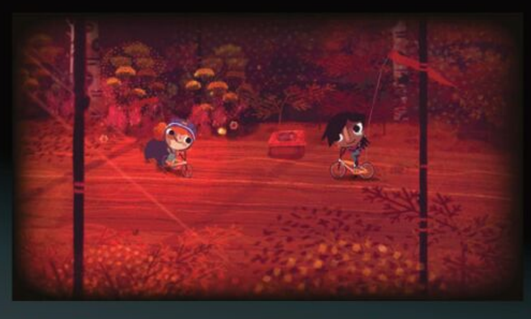
2016

This fantastic puzzler works as well on a smartphone as it does in virtual reality as you manipulate monster heads in order to solve their puzzle. It feels very much in keeping with some of Double Fine's Kinect-related work, breaking down the barriers to entry for players for a purer experience.

GANG BEASTS

2017

Another wonderfully simple but utterly engrossing experience, *Gang Beasts* somehow manages to make brutal hand-to-hand combat into something totally hilarious as simple grabbing controls dictate the state of play. Can you hang on long enough to be the last fighter standing?



KNIGHTS AND BIKES

2019

This 2016 Kickstarter was originally scheduled for 2017, but was delayed until 2019. The long gestation period has certainly been worth it, as *Knights And Bikes* is a lovely co-operative game that oozes charm as Demelza and her best friend, Nessa set off on an Enid Blyton-styled adventure.

OOBLETS

2020

This is currently in Early Access on PC and Xbox One. Ooblets is of course a glorious mix of *Pikmin*, *Pokémon*, *Animal Crossing* and *Harvest Moon* as you gather up creatures in a new town, farm and customise both your home and character clothing. It's almost painfully cute, and we love it.

INFORMATIVE JOURNAL
Weekly
Monkey missing from ZOO
What to say
did one e to the at
I think I'm
TEXT JOKE TO 032084
BRÜTAL LEGEND EXPECTED TO SWEEP ALL GDC AWARDS !!!1!!
Upen Walk to Use
Close Pick up Look at
Push Talk to Turn on
Pull Give Turn off

HOST MASTER AND THE CONQUEST OF HUMOR 2009

WRITER

We had a bunch of the comic book artists here at the time: Scott Campbell, Nathan Stapley, Raz [Razmig Mavlian] and Tasha [Harris]. We had a web developer at the time named Klint Honeychurch, who could whip those things out, and it was awesome. I feel like *Host Master And The Conquest Of Humor*, which was something that I did because I was having writer's block writing my jokes for hosting the awards at GDC, that experience of making an adventure game started that germination of an idea that turned out to be *Broken Age*. I think just revisiting it, I had kind of written off adventure games because no one wanted to make them anymore, and I didn't want to make anything that's scripted like that anymore. Everyone was pushing for more system-based games. But I was like, "It's kind of fun to think about puzzles and think of pointing and clicking."

COSTUME QUEST 2010

CREATIVE DIRECTOR, WRITER

That's where we split from being a company that makes one 60-person game to four fifteen-person games. In some ways I saw the writing on the wall. We were so lucky to get the money that we got for *Brütal Legend*, but $20 million games that have original IP and they're kind of wacky, I thought the time was done for those on the publisher side. And if we did get that kind of deal, the terms of it would be horrible, like we would lose our IP, and if we wanted to do something creative we needed to risk smaller budgets, so we switched to smaller budgets.

So when Tasha, who came from Pixar as an animator, had this idea about costumed kids on Halloween transforming into powerful warriors based on their costumes, I loved it, and we did it as a game jam called the Amnesia Fortnight, where you have two weeks to make a game, and it gave Tasha the chance to make anything you want in two weeks with a team. She made *Costume Quest*, and Lee made *Stacking* off of that, which was the next game.

STACKING 2011

CREATIVE DIRECTOR

It was a brilliant game. I still love it. Lee Petty, who was the art director on *Brütal Legend*, had a really unique vision for that game, and put an amazing art style together. It's still really unusual to this day to play that and see some of the things he did. The trick to that game is not just solving every puzzle once, but seeing how you can solve it five different ways.

IRON BRIGADE 2011

CREATIVE DIRECTOR, WRITER

That was Brad Muir, and that was an interesting experiment for us, really. What if we did a game that didn't start with story, as so many of our games start with world and story and character, but we start purely with mechanics, as that was more what Brad's style was. And that was fine, because we made a game that was all about mechanics, and then I came in and laid in the story on top of it, like "What's a good story that would make all of these giant mechs make sense?" That was a fun game to do. I think that's how a lot of professional writers in the game industry work, "The game is already done, could you come in and write the dialogue?"

SESAME STREET: ONCE UPON A MONSTER 2011

CREATIVE DIRECTOR

That's an example of how now that we're doing four projects at once, we can take risks and do things that we normally wouldn't do. Do a mechanics-first game, do an RPG, and then do a licensed project.

I remember I got to visit Henson studios and I got to touch Cookie Monster. I asked, "How many Cookie Monsters have there been? Like, 50 over time?" and they said, "No, there have been two." Only two Cookie Monster puppets, and this is one of them, and I was touching it. I got very emotional because of my childhood, and this was a childhood friend. It felt like meeting Ozzy Osbourne.

DOUBLE FINE HAPPY ACTION THEATER 2012

DIRECTOR

This is my surprise answer when people ask what game I am most proud of. That's the way I feel, because that and Kinect Party, which was the sequel to it because if you've ever seen someone play that game or you play it in person, to this day I keep my Xbox 360 in my living room, because when my daughter has a birthday party we turn it on, and I have never seen a room full of happier people playing a videogame. Two-year olds, grandma, everyone is just jumping up and down, yelling, screaming, throwing fireballs, and knocking at pigeons and playing in the ball pit and shooting lasers, without any sort of interface or instructions or any sort of explanation. We really had a dream for what that game would be like, and it really worked. Most of the time when people enjoy your game it's like, "Hmm, hmm." [chuckles] To be able to see people screaming their heads of as they play your game is like, "Wow! We've never made this much happiness in my life." That's so nice.

TIM SCHAFER'S OTHER CREDITS

THE DOUBLE FINE FOUNDER MADE HIS NAME ELSEWHERE TOO

MIDDLE MANAGER OF JUSTICE 2012

CREATIVE DIRECTOR

■ Our foray into free-to-play. Our big experiment in free-to-play. That was Kee Chi, who had been at the company for about 17 years and ran that game, it had a really great art style and lore. We started with monetisation. One of the things we found out about our creative culture at the company was it was not set up to monetise [laughs]. This was right when Zynga was king and talking about 'pinching the player' and wilting their crops and all of these things, it just didn't fit. Usually when someone would say something doesn't fit with our DNA, I would say, "We don't have DNA! We do whatever game we want." But that was our experience that maybe didn't fit with our DNA. It was a really fun game, but it made us feel that we didn't want to do free-to-play anymore.

THE CAVE 2013

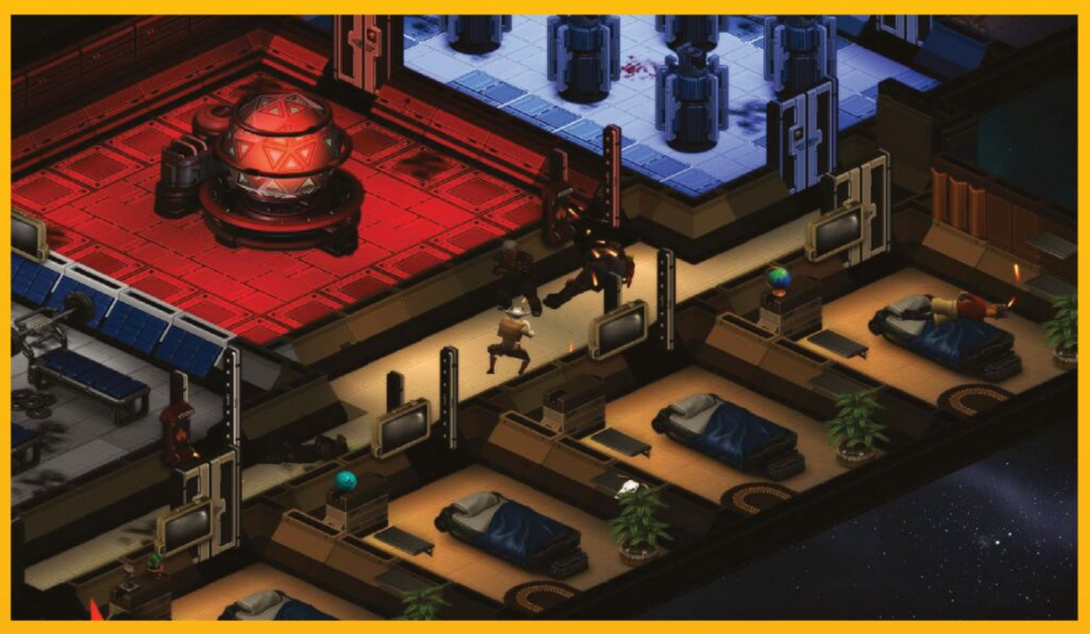
CREATIVE DIRECTOR

■ Ron and I were talking about projects that he could do, and he told me this idea about three people going down into a cave and jumping back and forth between the different characters, and I thought it sounded great. So he came on and made that game for Sega, and my daughter really loves that game. It's a fun co-op game. He just made that one game and went back to his mysterious life of adventure gaming.

SPACEBASE DF-9 2013

CREATIVE DIRECTOR

■ That was another foray into something different, but we tried free-to-play, so thought, "Let's try Early Access", as we'd never done that. JP LeBreton was working on *Broken Age*, because we had started *Broken Age* by this point, and he had a dream of making something like *Dwarf Fortress*, but in space. It was a small team, we put that out in Early Access, and there was an initial burst of enthusiasm for it. Then they kept working on it for another year in Early Access, and when it felt like it had run its course with fans, we ended production on that. There was a huge backlash on that. It was right in the middle of Gamergate, and it was hard to separate for us the fans' honest reaction from people who were exploiting that moment to discredit us. *Psychonauts* being cancelled was our darkest time with publishers, and that was our darkest time with the community. We had honestly messed up the messaging on that game, and gave people different expectations than we wanted to. If we were to do it over again, we would message it a lot differently. ▶



STAR WARS: SHADOWS OF THE EMPIRE/ EPISODE 1: RACER/ 1996/1999

NEVER ACTIVELY TRIED TO SABOTAGE THE PROJECT

■ That was something more about the camaraderie of LucasArts in those days. We had people making the adventure games and the original IP and then we had people making the *Star Wars* games right in the next room. *Jedi Knight* was being made right next to us, *Pod Racer* was being made right next to us. So we were friends with them hanging out in the office, and I was like, "Guys, you have to give me a credit in your game." And they were like "What?! You didn't do anything in this game." And I said, "Yeah, but I never actually tried to sabotage it, so I didn't do nothing." I didn't do anything bad. I didn't do a thing to help, but I didn't do anything to hurt, and that deserves recognition. Because I could have.

HAUNT 2012

VOICE ACTOR

■ I had hosted the Choice Awards at GDC. I was up there acting like a smartass, and Masaya Matsuura – who made *Parappa The Rapper*, which was a big influence on me – was out in the audience. He was sat there with his producer, and they were like, "We have this character in our game, *Haunt*, who is supposed to be kind of funny, but also kind of shady and not trustworthy." [laughs] I didn't know where they got that from, but they came up and talked to me about it, and asked if I wanted to do a voice for *Haunt*, and I told them, "I can't act, you guys." They said, "Come on, do it", and so I did it. I did my best, and you can't judge how your own voice sounds because I'm not a professional actor, so I just put everything I could into that. I don't know if people saw it or heard it, but it was fun to do. It was a fun game, and they were great people to work with, so no regrets.

BROKEN AGE 2015

DIRECTOR, WRITER, DESIGNER

■ I had an email from someone trying to get me to do a Kickstarter back in 2011 or 2010, and I was like, "What's Kickstarter?"And a business guy at the time was like, "You can get about $5,000 for that, max." So we didn't do it. Then our documentary crew – or rather now it's our documentary crew – but back then it was these guys called 2 Player Productions, who had made a *Minecraft* documentary. They had thought they wanted to go deeper into development earlier on and do another documentary and crowdfund it, and we thought we should probably crowdfund the game too, otherwise a publisher would say, "You can't tell that story." Most documentaries or making-ofs are marketing materials. They're trying to sell the game, so they don't want to hear about, "Oh, we cut that feature?" or that these two people fought on the game; the dark side of game development that every game has. So we did a Kickstarter, and it exploded. It was really nice to get all of that money, but it was really nice to get all of that love. We had just released *Once Upon A Monster*, and they had just cancelled the sequel, *Twice Upon A Monster*, and they weren't happy with sales, so they cancelled it.

So having just this surprise party for us from all of these people telling us they loved us and they wanted us to do this thing was just a big lift, and it got us started on a game, which then once I designed it, I was like, "Oh, this is even bigger than the money that we got." But we were now making money because we had just self-published with an angel investor ports to the PC of *Costume Quest*. We started making our own revenue, and we put that all into *Broken Age*. But we didn't announce as the game was running late, and we got a huge backlash of emails, also during Gamergate, and it was also very convoluted.

People had a lot of different expectations back then about crowdfunding. When we first announced the plot for *Broken Age* some people were like, "Wait, I thought that we were going to help decide what the plot was." And a lot of people thought it was a pre-order service, that the game would be done really soon. So I think with a lot of that, people have learned what crowdfunding really is, which is supporting a creative project you believe in, and there's some risk associated with that, for sure. Anyway, we doubled the size of the game, and we documented the whole thing. We made the game, and I love the game and the documentary, some people cite it as hugely inspirational for them. As a game developer it helps them see that other game developers struggle with the same things that they do, and seeing how the team creatively worked with each other.

MASSIVE CHALICE 2015

CREATIVE DIRECTOR

■ Kind of a follow-up to *Iron Brigade* – another mechanics-first game. It had a really interesting idea about inheritance. It was not my style of game to play or make, it was very much Brad [Muir]'s style, but I think we also tried to make it a Double Fine game, and make it feel unique and have some humour to it. It's a very well-respected game, and the fans are almost different from our regular community, because it's so tactical. There are people who play that game and love that game who have no idea what *Monkey Island* is, [laughs] and that's great.

GRIM FANDANGO REMASTERED 2015

CREATIVE DIRECTOR

■ That was a huge one. LucasArts was sold to Disney, we didn't know what would happen with the change of management, and it turned out we found some fans of the old adventure games at Disney, and they wanted to talk about it. What remained of LucasArts wanted to talk about it, and Sony got involved, and it seemed like this perfect storm of people who liked *Grim Fandango* who came together and said, "Yeah, let's do this."

We had to find a guy who collected old hardware to read all of these old tapes, and he was like, "This is probably the last time this drive is going to be readable." But because we could find the uncompressed DAT recordings of the voice, uncompressed recordings of the music, and just going back to uncompressed source material was such a relief, because we had to cram stuff on to even fit on CD-ROM back then.

It was great to do things for the players. Like, people make fun of the tank controls in *Grim Fandango* a lot, and it's kind of like looking at old pictures of my mum from the Seventies wearing striped bellbottoms, and she's like, "That was very popular at the time." That's always my explanation for tank controls: it was very popular at the time. You ever heard of *Tomb Raider*? *Resident Evil*? All of those games used tank controls because navigating through 3D space with a character was new to us, and then *Super Mario 64* came out and it was,"Oh, you push in the direction that you want to go? Oh, yeah!"

So anyway, on the remaster we were able to do things like add the choice of having tank controls, and you'll still get an achievement for it, but you also get point-and-click controls, and you never had that in *Grim Fandango*. It was nice to be able to do that too. So all round, an amazing opportunity. And we sold more copies of that than we did of the first game.

DAY OF THE TENTACLE REMASTERED 2016

CREATIVE DIRECTOR

That voice had been compressed to 8-bit, and when he says the letter S you can just hear the compression artefacts and stuff. That was horrible. But I got to hang out with Dave Grossman again, and it was the same thing: a reunion with the whole team and repainting that whole thing. Then we got more into adding features where they could have any combination of features, like the old graphics with the new controls or the new sound effects. They could mix and match whatever kind of game they wanted.

PSYCHONAUTS IN THE RHOMBUS OF RUIN 2017

CREATIVE DIRECTOR, WRITER

We wanted to make a VR game, and we were going into such unknown waters we were like, "Let's go in there with a friend, let's go in there with Raz." It seemed like a natural thing if we're going into the human mind and being surrounded by crazy visuals we could be in VR. But I get super sick in VR if I move at all, and so we made this game where you're tied to a chair, but it turned out to be a point-and-click adventure by the time we were done. You're pointing with your face, but you're looking around and solving puzzles.

We had Richard Horvitz, Nicki Rapp, Alexis Lezin, Stephen Stanton, Nick Jameson and all of the people who were in the original cast, and it was right during the crowdfunding campaign for *Psychonauts 2*. To be launching the campaign and be in the studio in LA with Richard Horvitz and be talking to him about Raz and Sasha and Milla, we were just immediately back in this world. It was fun to feel like this was something that had just been kept alive in my head, and I can just go back into this place and think about these characters again. That's how I knew *Psychonauts 2* would be OK.

PSYCHONAUTS 2 2021

CREATIVE DIRECTOR, DIRECTOR, WRITER

It was almost a self-fulfilling thing, because I said in an interview that I would like to make it, but I don't have the money. Then Notch tweeted that he would pay for it, and that didn't end up working out, but it started that weird feeling in my head of, "We could make it." We kept seeing if anyone else wanted to, and had an idea of crowdfunding. We're all done with the story, but still trying to keep our backer updates spoiler-free by focusing on the team and blurring out the rest. I'm excited, because we're trying to have all of the things that made the first game special, but also really tune up the mechanics and the platforming to make it really tight gameplay wise. It's also just really fun to see the characters looking beautiful. ✱

HOLOGRAM OF A BRAIN INSIDE A GLOBE LEVITATING (LIKE A CHANDELIER) - SCANS VISITORS - (SIMILAR TO A METAL DETECTOR).
FRONT DESK PERSON SITTING INSIDE LOBE LIKE A NEWS REPORTER
GEODESIC MOTIF "MENTAL" SOUND-PROOFING MATERIAL
RAZ ENTERS HQ. STANDING ON SCOTT'S PSYCHONAUTS LOGO ON POLISHED FLOOR.
HQ
PSYCHONAUTS 2 - HQ - LOBBY
RICHARD 11/15

MORE FROM DOUBLE FINE

- EPIC SAGA: EXTREME FIGHTER, BROWSER [2007]
- MY GAME ABOUT ME: OLYMPIC CHALLENGE. BROWSER [2008]
- TASHA'A GAME, BROWSER [2008]
- KINECT PARTY, XBOX 360 [2012]
- AMNESIA FORTNIGHT 2012, PC [2012]
- HOST MASTER DEUX: QUEST FOR IDENTITY, BROWSER [2013]
- DROPCHORD, PC, MOBILE [2013]
- AUTONOMOUS, PC [2013]
- THE PLAYROOM: MY ALIEN BUDDY, PS4 [2013]
- HACK 'N' SLASH, PC [2014]
- COSTUME QUEST 2, VARIOUS, [2014]
- AMNESIA FORTNIGHT 2014, PC [2014]
- DAY OF THE TENTACLE REMASTERED, VARIOUS, [2016]
- HEADLANDER, VARIOUS [2016]
- FULL THROTTLE REMASTERED, VARIOUS [2017]
- RAD, VARIOUS [2019]

CLASSIC MOMENTS

Rambo III

» **PLATFORM:** MEGA DRIVE » **RELEASED:** 1989 » **DEVELOPER:** SEGA

You've always been a little cautious about film licences in the past, but you're feeling lucky about the purchase of Sega's new *Rambo* game. The back of the box promises you *Commando*-style combat and dramatic one-on-one interactions with heavily armed Hind helicopters using just your bow, which makes you tremendously excited. Starting up the game, and you're not disappointed with what you discover lurking within Sega's latest cart. Rambo has access to explosive arrows, bombs and a Bowie knife, as well as a deadly machine gun, and you have an absolute whale of a time, racing through the first stage, gunning and knifing the enemy soldiers that stumble into your murderous path. You soon find yourself up against that deadly Hind, but it goes down rather easily and you're a tad disappointed. Luckily, your next encounter with a heavily armoured foe is a lot more exciting and awaits you at the end of *Rambo*'s third stage. You find yourself with very little cover and in the sights of a ginormous tank, which threatens to blow you to smithereens. Cool as a cucumber, you come out of cover, take aim and BAM! The tank is no more and all that's left behind is just a twisted metal carcass. Huzzah! ✱

BIO

While Ocean Software secured the *Rambo III* licence for the home computers of the time, Sega nabbed the rights to release *Rambo* games on its own home consoles. The Master System version was released in 1988 and took the form of an *Operation Wolf*-style shooter. Sega mixed things up a little for the later Mega Drive release, switching the action between top-down stages with objectives like rescuing prisoners or destroying enemy supplies and more dramatic action sequences that places the viewpoint behind Rambo and sees you attempting to take on various vehicles with your explosive arrows.

MORE CLASSIC RAMBO III MOMENTS

Explosions everywhere

Explosions and *Rambo* films go together like Nick and Sonic so it makes sense that tremendous pyrotechnics found their way into Sega's game. Typically you'll want to use bombs and your explosive arrows to create the most carnage, but certain objects in the game can be persuaded to burst into flames with your trusty machine gun.

Stabby! Stabby!

You can keep your enemies at bay with your machine gun, but real Rambos use a knife – a big stabby knife. Not only does it look badass, but stabbing an enemy to death earns points, which get ever higher if you can chain kills together without getting hit. It's a nice risk vs reward system that benefits aggressive players.

It's me, Rutger Hauer

The late Danish film star might not have appeared in any *Rambo* films, but that doesn't stop him from appearing in *Rambo III*. The second stage has you looking for a secret agent, but he's well-hidden in a dangerous maze. The third person you encounter is not only the agent you're looking for but has an uncanny resemblance to the *Blade Runner* and *Hobo With A Shotgun* star.

Triple Trouble

By the time you get to the fifth level the difficulty really starts to ramp up. Early on in the stage you come across a battalion of three tanks which threaten to prematurely stop your quest. Careful players will attempt to simply run past them, but awesome players – like us – will use their explosive arrows to stop them in their tank tracks.

Bluffer's Guide to METROI

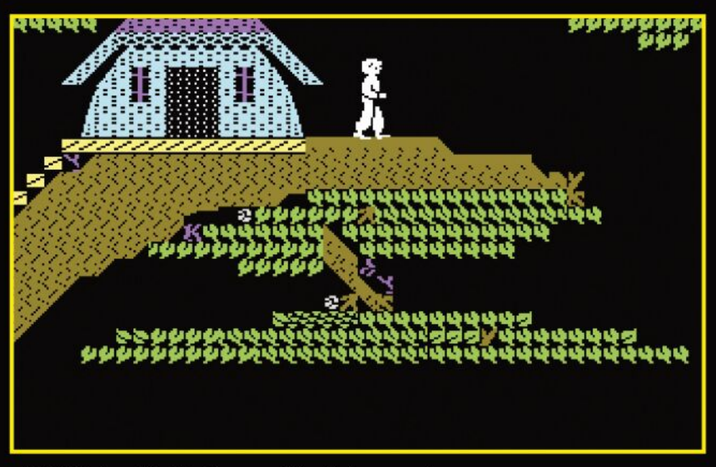
NOW WE'VE UNLOCKED THE SPECIAL 'HINDSIGHT' ABILITY, IT'S TIME TO BACKTRACK OUR WAY THROUGH THE HISTORY OF A GENRE THAT'S PRODUCED A BEVY OF CLASSICS AND HAS A FASCINATING STORY TO TELL

Words By Paul Walker-Emig

The obvious thing to do when taking a deep dive into the rich world of Metroidvanias would be to start with the two games from which the genre borrows its name – *Metroid* and *Castlevania: Symphony Of The Night*. While we wouldn't underplay the colossal impact these games have had on the genre, to take these two titles and say "here are the two games that invented the template for the Metroidvania and which every game in that genre has followed since", while containing a kernel of truth, would grossly simplify a history that is far more complex and contested than that narrative would have you believe. That becomes clear as soon as you start trying to define what a Metroidvania is.

For the most part, the developers we asked to tell us what 'Metroidvania' means to them gave us a similar answer. Graham Smith, co-founder and producer at Drinkbox Studios, the developer behind the *Guacamelee* games, cites "free-form open exploration, with parts of the world gated behind the unlocking of new powers/abilities/gear, requiring the player to re-explore through old areas". Simon Andersen, art director at D-Pad Studios, the team that made *Owlboy*, tells us that, "The key aspects have always been a focus on open exploration within a confined set of rooms – metaphorical or literal – where new areas are gated off by a new power that functions as a key", and also refers to an "emphasis on returning to older parts of the map". Last but not least, Thomas Happ, the creator of *Axiom Verge*, says that, "A Metroidvania is generally any game where, as you explore, you encounter gated off areas which you later can unlock with items, abilities, or events."

Clear and coherent as these definitions are, our interviewees nevertheless began gesturing to some of the complexities of determining exactly what is, or is



» [C64] *Below The Root* is one of the first games to resemble what we would consider a Metroidvania today.

» [C64] *Arac* is another early home computer release that shares similarities with *Metroid*.

Dvanias

» [NES] Full of new ideas and approaches, *Blaster Master* was a great Metroidvania before Metroidvania was even a word.

» [C64] Games like *A Journey To The Centre Of The Earth* have been unduly forgotten in the Metroidvania canon.

not, a Metroidvania. Thomas says that there is a lot of variation in how the structure of a Metroidvania can be handled. "It could be that it's just optional content that's gated off or it could be that the whole game structure is nested behind a series of gates." It's a reasonable suggestion, but it's not difficult to imagine purists arguing that a game that does not *require* you to backtrack to access areas with new abilities doesn't *really* count as a Metroidvania. Simon suggests that while there are plenty of 3D games that could be considered Metroidvanias, "There's still a somewhat unspoken agreement that the games should in some way mirror the namesake visually, if only in perspective." And Jens Andersson, programmer on *Yoku's Island Express*, says that side scrolling usually comes to mind when he thinks 'Metroidvania', though he has "decided that's a bit too limiting". Here we find ourselves butting up against a debate about the extent to which 3D games can be considered Metroidvanias. We're not going to try and lay down the law here on what does and does not count as a Metroidvania; it's just worth acknowledging that the tightly defined nature of the genre's structure often results in games pushing up against those boundaries and complicating our conception of what a Metroidvania is.

With that in mind, we should exercise some caution when trying to pinpoint the moment when the genre was born. The easiest thing to do would be to pick out *Metroid* (1986), developed by Nintendo's R&D1 and Intelligent Systems, ▶

"A METROIDVANIA IS GENERALLY ANY GAME WHERE, AS YOU EXPLORE, YOU ENCOUNTER GATED OFF AREAS WHICH YOU CAN LATER UNLOCK WITH ITEMS, ABILITIES, OR EVENTS"
Thomas Happ

Jens Andersson

Graham Smith

Joakim Sandberg

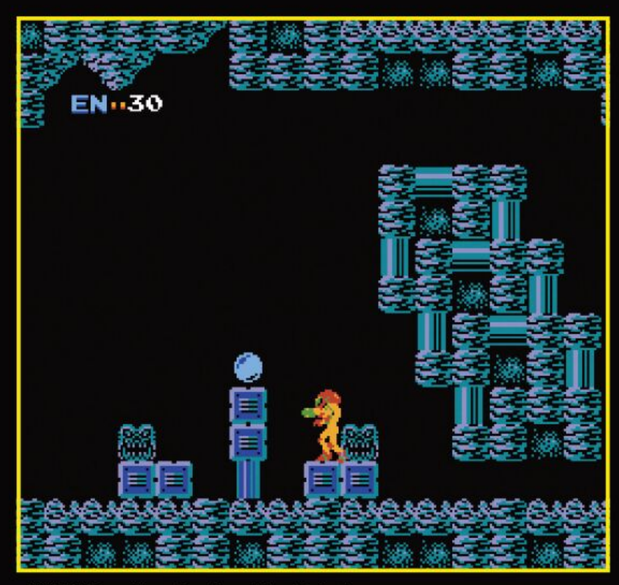
Thomas Happ

What Makes A Great METROIDVANIA?

FULFILLING A CLASSIC FORMULA

■ NON-LINEAR EXPLORATION: The best examples of the genre not only force you to explore to progress, but make that process a pleasure, with every new discovery a thrill.
■ COOL ABILITIES: A great Metroidvania should have abilities that can be applied to both exploration and combat, and ensure that they are fun to use, as well as functional.
■ BACKTRACKING: Getting a new ability and having an epiphany about how that will let you get past an obstacle you got stuck on previously has always been one of the most satisfying parts of the genre.
ENERGY 95
025
03
■ ATMOSPHERE: Because you spend so much time exploring and backtracking in Metroidvanias, crafting an atmosphere that makes the world compelling adds a lot to the experience.
■ GREAT BOSSES: A Metroidvania doesn't necessarily *need* bosses, but most of the best ones have them. It's a great way of forcing you to put new abilities to the test.

▶ and call it a day. But again, that would be a simplification. Though it is true that *Metroid* is one of the first games to combine the elements typically considered to constitute a Metroidvania, these ideas did not emerge in a vacuum. Non-linear exploration, backtracking and the unlocking of new abilities required for progress are all things that games released prior to *Metroid* had experimented with and it's worth taking a moment to pay homage to these 'proto-Metroidvania' titles. *The Pharaoh's Curse*, originally released in 1983 for the Atari 8-bit systems, sees you exploring a series of rooms in an Egyptian tomb. The game requires you to find 16 treasures before returning to the surface and find keys to access locked gates and use a flying creature called the Winged Avenger to carry you to areas that are otherwise inaccessible. If it had been released at a time when the term existed, *A Journey To The Centre Of The Earth* (1984) for Commodore 64 may very well have been known as a Metroidvania. Again, you are tasked with finding a number of treasures in a system of underground caves and returning to the surface. Added to this exploration element are a series of ability-expanding items, like oxygen pills and dynamite, required



» [NES] Reaching the Morphing Ball, the first new ability in *Metroid*.

1984

■ *A Journey To The Centre Of The Earth* hits Commodore 64 and *Below The Root* the PC, pioneering elements we would now think of as key to Metroidvanias.

1986

■ Nintendo's *Metroid* is released for the NES and introduces Samus Arun. The lesser known *Arac* and *Sacred Armour Of Antiriad* are released for home computers.

1988

■ Sunsoft's *Blaster Master* hits the NES, mixing top-down sections with sidescrolling to offer a slightly different approach to the genre. Several sequels would follow.

1989

■ *Wonderboy III: The Dragon's Trap* takes Metroidvania inspirations to send the Sega series in new directions. New areas are accessed with animal forms.

1994

■ The genre defining *Super Metroid* hits the SNES, influencing an entire generation of developers and enshrining the *Metroid* series' prominent place in gaming history.

1997

■ Konami's *Castlevania: Symphony Of The Night* bucks the 3D trend on PlayStation to deliver a legendary 2D title with an enduring reputation as an all-time classic.

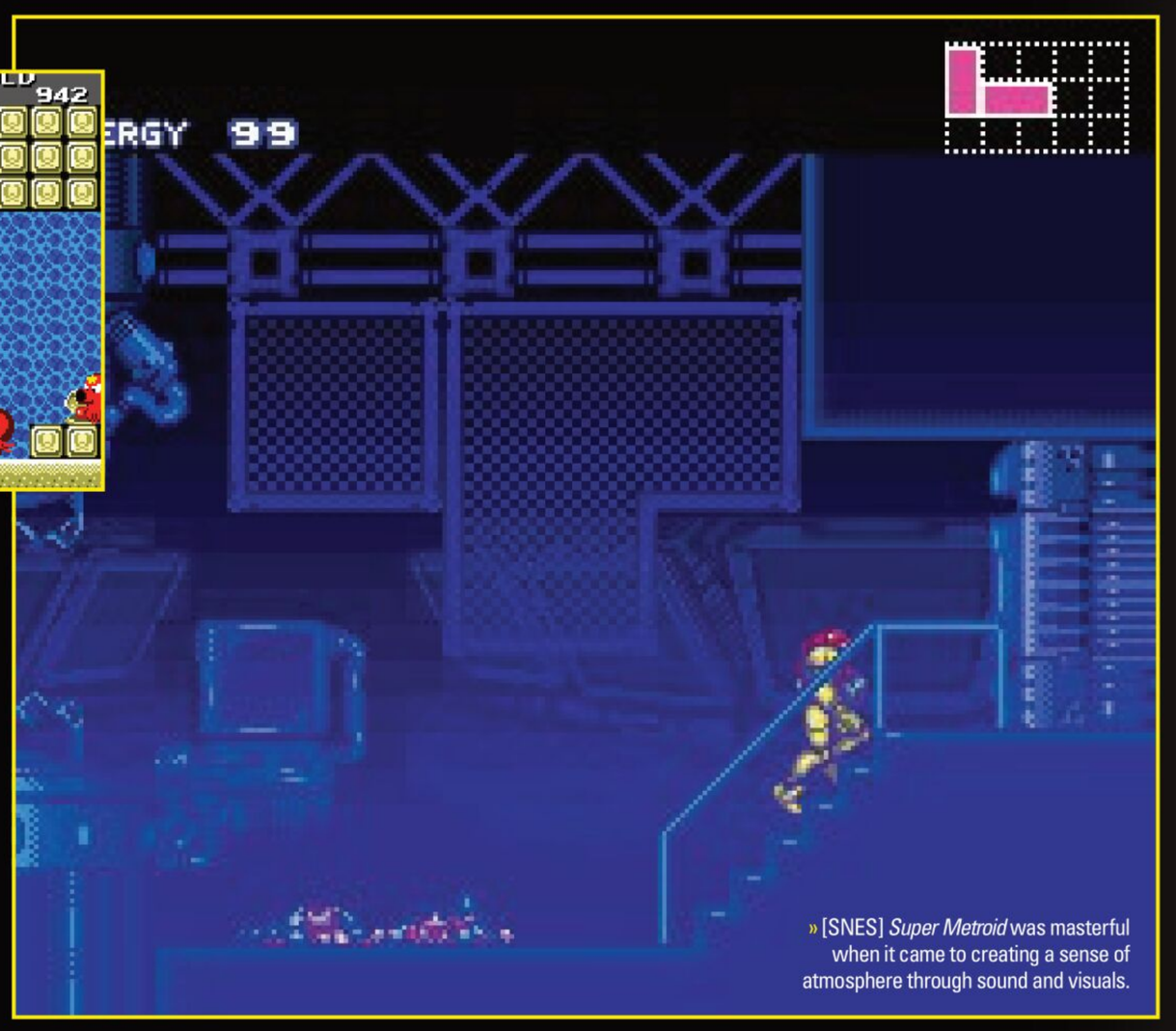
2002

■ *Metroid Prime* takes the Metroidvania 3D, *Metroid: Fusion* hits the Game Boy Advance and the first entry in the *Shantae* series by Wayforward Technologies is released.

2004

■ Influential indie title *Cave Story* is released this year. Nintendo has a great year as well, releasing both *Metroid Prime 2* and *Metroid: Zero Mission* (an enhanced remake of *Metroid*).

» [Master System] *Wonder Boy III: The Dragon's Trap* lets you transform into different animals, which opened up new areas.



» [SNES] *Super Metroid* was masterful when it came to creating a sense of atmosphere through sound and visuals.

to access otherwise inaccessible areas. This year also gave us *Below The Root*, which came out on IBM PCs, Commodore 64 and Apple II. It's more an adventure game than a platformer, but it does feature a series of unlockable abilities, including a glider-like Shuba and Spirit-Skills that are vital to opening up new avenues for progress.

Even when we get to 1986, the year that *Metroid* was released, there are other titles that put to bed the idea that *Metroid* 'invented' the Metroidvania. *Arac* is a Commodore 64 game where you play as a robot who can capture enemies to gain new abilities that allow you to get closer to your final goal, and *The Sacred Armour Of Antiriad* sees you start with just a loincloth and rocks, and end up flying around and shooting lasers using upgrades for the powerful Antiriad armour. Graham points to the example of another game that released in Japanese arcades in 1986, before hitting the NES and C64 a year later, "Although it's one of the lesser known Metroidvania style games, I had a blast playing through *Rygar* on the NES with a close friend. The game alternates between side-scrolling platforming levels and top-down exploratory levels, which was the first time I had ever seen a game do that."

Having established that *Metroid* did not 'invent' the Metroidvania, we can now unreservedly give it the credit it is due. *Metroid* played a massive role when it came to formalising the structure of the genre, hence why, of the early crop of Metroidvanias, it is probably the most recognisable when it comes to what we would expect to see from the genre today. Introducing us to the now legendary character of Samus Aran, *Metroid* drops you onto the hostile Planet Zebes with a gun and very little direction, forcing you to explore and discover new abilities like the Morph Ball and Screw Attack to enhance your effectiveness in combat and be able to explore locations that would otherwise be locked off. "I was about eight when I played *Metroid*," Thomas recalls, "and it was revolutionary to my young mind because it was one of the first games I'd played where you could explore a large world filled with secrets."

That thrill of exploration that typifies the genre was something carried over into the game's sequel, *Super Metroid*, released on the SNES in 1994. Refining everything about the first entry, it is still regarded as one of the best games ever released and played a huge role in popularising the genre.

"*Metroid* and probably more notably, *Super Metroid*, were unusual in their emphasis on getting lost," says Simon while reflecting on their appeal. "In a time when arcade action games were still the norm, you would generally have a pretty stark divide in genres. Games that focussed on atmosphere and varied choices were generally something aimed at the home computer market, and while consoles were no strangers to things like RPGs and the like, there weren't many games that allowed you to get lost on purpose. Moreover, the *Metroid* series was a lot more physical than an RPG that relied on metaphorical representations for the world you were interacting with," Simon continues. "You fought monsters in a similar fashion to a run-and-gunner, but if you wanted to find out what was at the top of a cliff you physically had to climb it somehow. It's a subtle difference as more slower-paced games would often show you a problem in a more abstract form to explain to you why an issue was not solvable. *Metroid* left you with a physical problem with no answers, and you could easily wander aimlessly

"METROID AND PROBABLY MORE NOTABLY, SUPER METROID, WERE UNUSUAL IN THEIR EMPHASIS ON GETTING LOST"
Simon Andersen

» [Game Boy Color] The *Shantae* series doesn't get a lot of attention, but has delivered lots of fantastic Metroidvanias.

2009

■ Rocksteady Studios' *Batman: Arkham Asylum* helps make Metroidvania mainstream and Chair's *Shadow Complex* sells like proverbial hotcakes on the Xbox 360.

2013

■ The excellent *Guacamelee!* and *Steamworld Dig* emerge as part of a snowballing trend of great Metroidvanias from indies. Both titles would receive sequels in later years.

2015

■ The fantastic retro-inspired *Axiom Verge* by Thomas Happ and Moon Studios' exceptionally beautiful *Ori And The Blind Forest* both win critical acclaim from the games industry.

2016

■ *Owlboy*, which began development in 2006, is finally released and proves to be a real hoot. *Shantae: Half-Genie Hero* and Xbox One exclusive *ReCore* are also released.

2017

■ Team Cherry's Kickstarter, *Hollow Knight* wins widespread acclaim and Arkane Studios' *Prey* shows how Metroidvania elements can be blended with other genres.

2018

■ In a bumper year for the genre, we get *Steamworld Dig 2*, *Guacamelee! 2*, Motion Twins' *Dead Cells*, *Iconoclasts*, *Yoku's Island Express* and Sabotage Studios' *The Messenger*.

2019

■ *Bloodstained: Ritual Of The Night*, *Shantae And The Seven Sirens*, *Gato Roboto*, *Headlander*, *Blasphemous* and *Star Wars Jedi: Fallen Order* are all released this year.

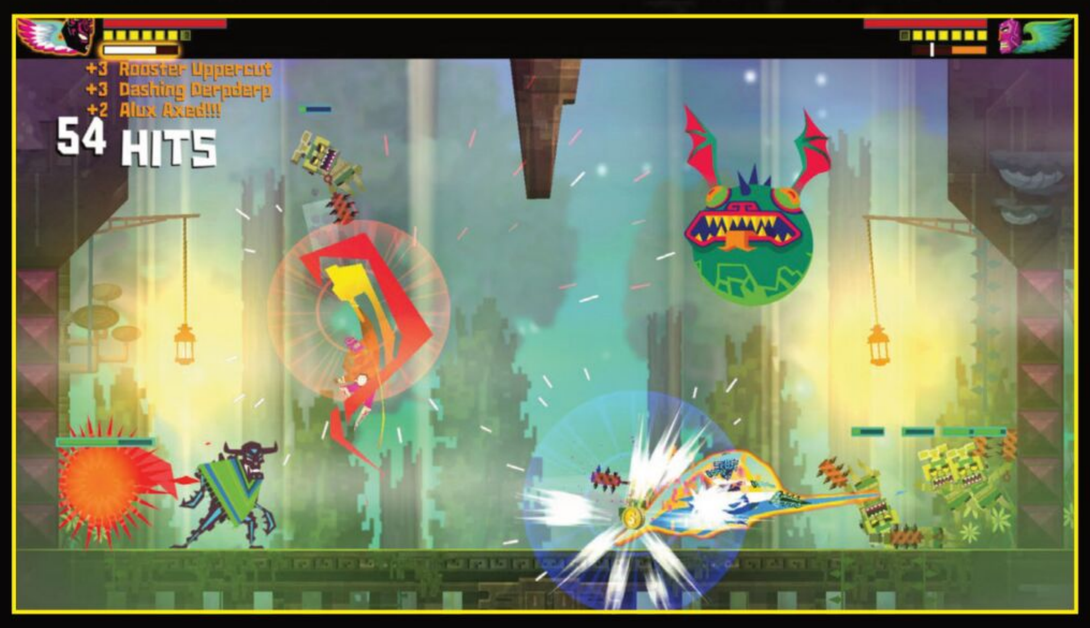
2020

■ *Blind Forest* sequel, *Ori And The Will Of The Wisps* comes out, along with 'reverse horror game' *Carrion*, which has you playing as a very dangerous tentacled monster.

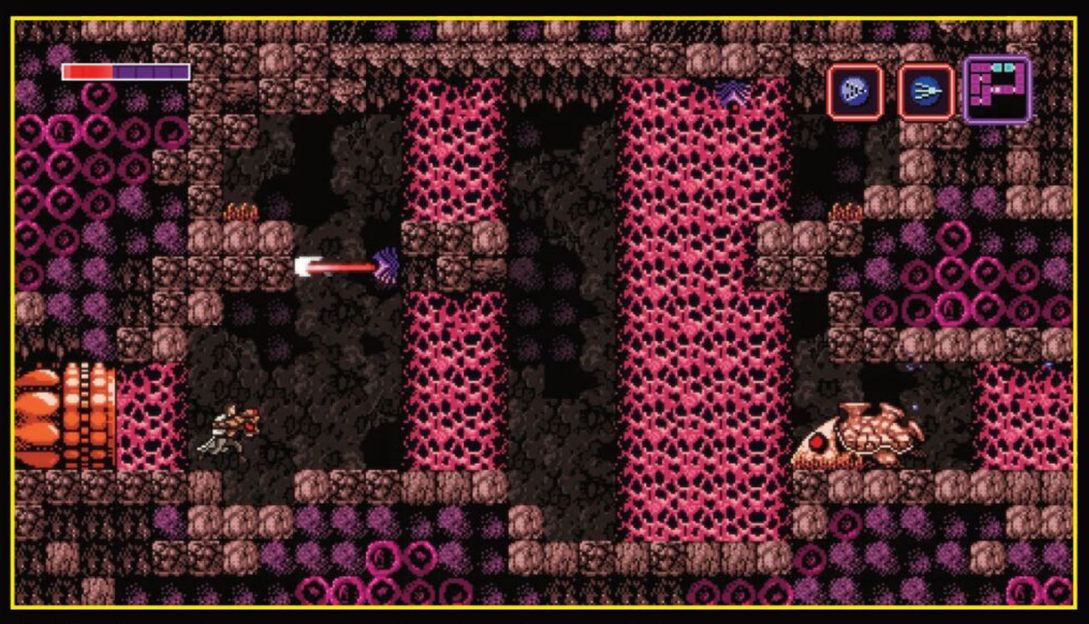
until you found a tool to help you through that area. Yet the fact that it was a physical problem meant nothing was vague. It makes sense that running faster gets you through a room with quickly closing doors."

Though we still hadn't got to the release of the game used in the second-half of the Metroidvania portmanteau and the coining of the term, titles we could now reasonably apply the Metroidvania label to retrospectively continued to be released. The 1988 NES title *Blaster Master* mixes 2D platforming and top-down sections where you switch between controlling protagonist Jason and piloting a tank, with new abilities that could be applied in earlier levels unlocked by defeating bosses. In 1989, Master System title *Wonder Boy III: The Dragon's Trap* took the series in a new direction by introducing the kind of non-linear, item-dependent structure typical of Metroidvanias. The twist here was rather than accessing a new area through a specific item, you could instead morph into a new animal form. In 1994, the year *Super Metroid* was released, *Super Adventure Island 2* offered the option to visit different islands and find items and equipment vital to progress on other islands.

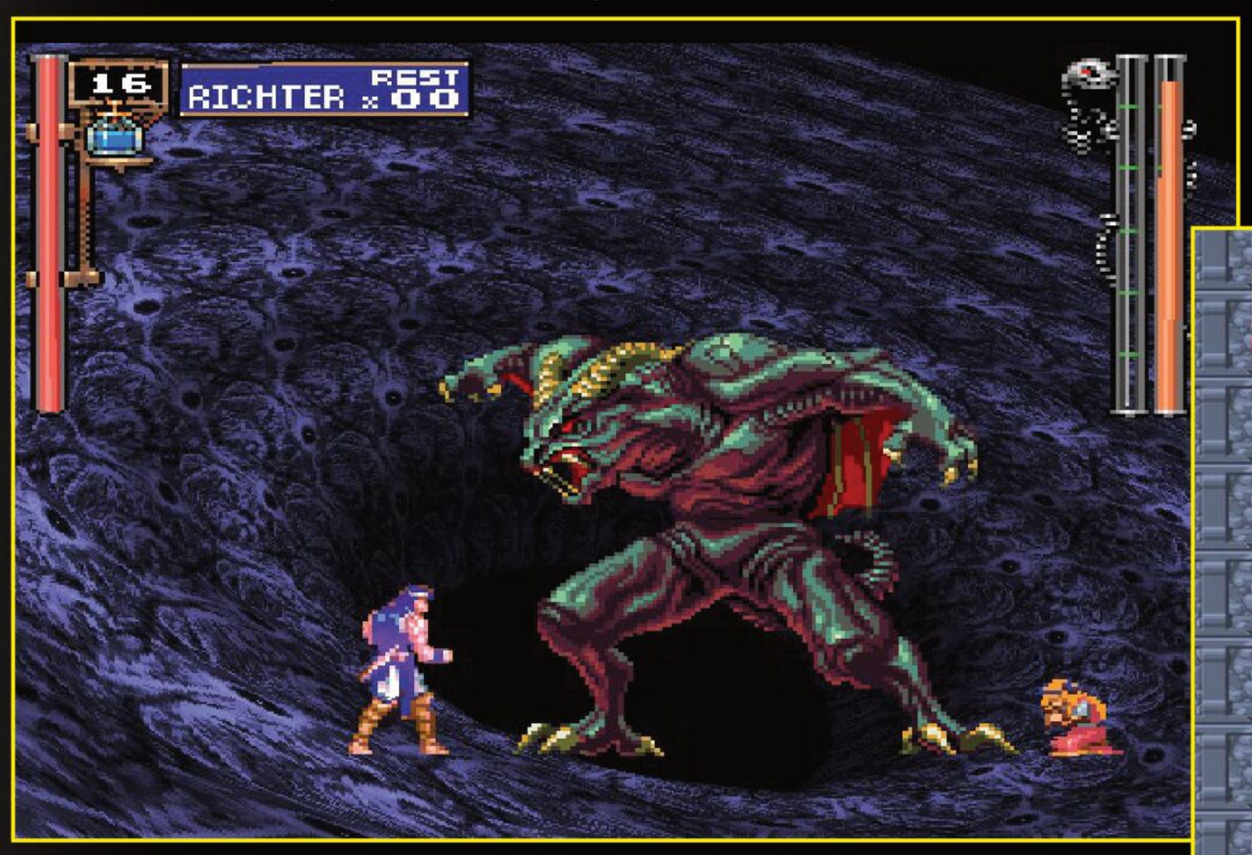
That takes us to 1997 and the release of *Castlevania: Symphony Of The Night* for the PlayStation. Though the *Castlevania* series began with straight-up platforming, it experimented in subsequent releases with non-linear exploration, culminating in the masterpiece that is *Symphony Of The Night*. The game sees you criss-crossing Dracula's castle, gaining new abilities as you go, as well as new forms, assistant director Koji Igarashi citing the *Zelda* series as a key influence on that structure.



» [PC] That *Guacamelee* finds a way to make unlockable abilities, like the uppercut, fun to use in combat and platforming is part of what makes it a success.



» [PC] Though it has clear retro inspirations, *Axiom Verge* shines thanks to its innovative and original take on the abilities it brings to the Metroidvania formula.



» [PlayStation] Opening on a boss fight with Dracula was a pretty epic way to kick off *Symphony Of The Night*.

"*Symphony Of The Night* inspired a lot of the future of action games incorporating RPG stats and damage numbers, popularising a new degree of character expression and growth most action games prior didn't really go for," suggests Joakim Sandberg, the developer of *Iconoclasts* (2018). "Along with *Metroid*, it made you really get familiar with one continuous world. They stuck in your mind, became characters of their own, in a way. Returning to an area you already mastered has a form of compressed nostalgia, and sense of familiarity and safety. That influenced so many games to come, not just within this genre."

Indeed, zeroing in on the richness of those worlds should remind us that *Super Metroid* and *Castlevania* aren't just towering giants of the genre because of how well they embody the Metroidvania template, it's because they are superb games in and of themselves. "Both of them excelled with presenting a world for you to explore and master, rather than a string of levels. The idea that the player got to decide where to go next really spoke to me and has influenced everything I've worked on," says Jens. "I think what stuck with me the most [from *Symphony Of The Night*] was the artistic detail of the castle and Michiru Yamane's orchestral soundtrack. They combined in a way that made you really want to explore more of that world," says Thomas, reminding us that rich aesthetics and the creation of a desire to make you *want* to explore are an important part of why *SOTN* and *Super Metroid* had their names combined to give the genre it's name. "They're popular for good reason," to use Joakim's words.

In the wake of *Symphony Of The Night*, something interesting happens. Given the critical praise lavished on *Super Metroid* and *Castlevania* and their prominent positions today in greatest-game-

"SYMPHONY OF THE NIGHT INSPIRED A LOT OF THE FUTURE OF ACTION GAMES INCORPORATING RPG STATS AND DAMAGE NUMBERS, POPULARISING A NEW DEGREE OF CHARACTER EXPRESSION AND GROWTH MOST ACTION GAMES PRIOR DIDN'T REALLY GO FOR"
Joakim Sandberg

» [PC] *Cave Story* is credited as the game that showed that indies could compete with bigger studios and highlighted that 2D platformers were a viable genre.

» [PC] The sprawling and atmospheric *Hollow Knight* stands out as one of the most critically acclaimed Metroidvanias of recent years.

» [PC] It's quite common for Metroidvanias to be sparse in terms of story, but the likes of *Iconoclasts* prove there's no reason they can't tell a tale.

ever discussions, you might expect that they would have unleashed a wave of copycat Metroidvanias. That didn't happen. "The genre seemed to fall into the background for a while," Graham reflects.

Castlevania moved away from the Metroidvania formula for its two N64 releases in 1999 – *Castlevania* and *Castlevania: Legacy Of Darkness*. Konami would only periodically return to the genre with handheld *Castlevania* releases, such as *Castlevania: Aria Of Sorrow* for the Game Boy Advance in 2003 and *Castlevania: Dawn Of Sorrow* in 2005. We did at least get the debut of another now long-running series with the release of the first *Shantae* game for the Game Boy Colour in 2002, but the half-genie hero of that fun and colourful series was then absent until 2010 with *Shantae: Risky's Revenge*. *Metroid* kept flying the flag to some degree with *Metroid Fusion* for the Game Boy Advance and *Metroid Prime* for the Gamecube, both released in 2002, the latter proving it was possible to translate the Metroidvania into 3D. "Being dropped into that unknown and beautiful world was amazing, and their use of environmental storytelling is something I think has inspired a lot of designers," says Jens on *Metroid Prime*. "Their introductory level was superb, where you got to feel the power of Samus' suit, and then spread all those abilities across the game."

Nonetheless, *Metroid Prime* was an outlier, not the harbinger of a trend. "I believe it may have had something to do with the push more towards 3D games at that time," suggests Graham on the relative dearth of Metroidvania games at that time.

"AAA studios need a big licence to make Metroidvanias feasible," Thomas argues, citing the *Batman: Arkham* franchise and *Star Wars Jedi: Fallen Order*, "so it happens a lot less often". Graham points out that, "Modern 3D games come with additional player expectations, like epic environments, motion capture animations, voice actors, etc. Designing good 3D combat mechanics like those found in *Arkham Asylum* can also be very challenging. I think the costs and financial risks are much higher when considering 3D, which may be one reason that people avoid doing 3D games in the genre."

There was, however, a revival in the Metroidvania genre. It was

Essential METROIDVANIAS

BACKTRACKING THROUGH THE CLASSICS

Super Metroid

This SNES classic is still regarded as one of the greatest games ever made, *Super Metroid* simply had to be on this list. It is as well-regarded for its expertly crafted foreboding sci-fi atmosphere, aesthetics and incredible music as well as the fantastic level design and mechanics. Fortunately, Nintendo has frequently released it on modern consoles, most recently via the Switch's online subscription service, meaning it's remained easy to play.

Castlevania: Symphony Of The Night

One of the game's responsible for the very term 'Metroidvania' is another no-brainer when it comes to Metroidvania essentials. Though it didn't perform particularly well at release on PlayStation, its quality led to gradual word of mouth success and its well-deserved reputation has only been enhanced over the years. Its rich systems and the memorable aesthetics of Dracula's castle are still a treat today.

Cave Story

The game often credited as the first modern 'indie' game is both interesting because of that important historical role and a brilliant game in and of itself. Playing it today, you can easily see how this retro love letter, directly inspired by the likes of *Metroid*, showed how the 2D Metroidvania remained relevant. An enhanced version *Cave Story+*, was released for PC in 2011 and the Switch in 2017 and there's 2012 version for the 3DS, *Cave Story 3D*.

Hollow Knight

"*Hollow Knight* is now easily my favourite game in the genre," says Graham Smith of Drinkbox Studios. "The world that they crafted feels truly epic, with so many memorable characters and areas, surprises around every turn, and an incredible number of unique combat challenges. They managed to create a vast fantasy world rich with interesting history that's unlike anything I've seen in the genre."

Metroid Prime

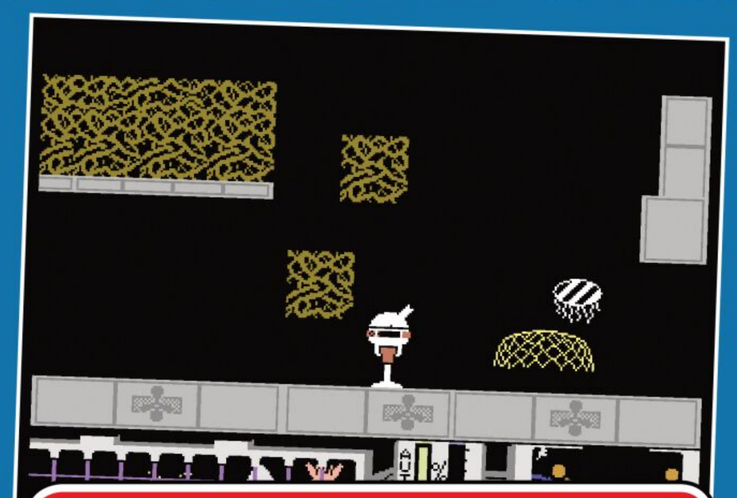
While it's true that the genre is strongly associated with 2D, there are some incredible 3D titles out there, so we wanted to be sure to include one of those. Retro Studios' GameCube title is the obvious choice. As if the *Metroid* series hadn't done enough pioneering, this is the title that showed how compelling the Metroidvania formula could be when translated into a 3D world.

Obscure ODDITIES

OFF-KILTER ENTRIES TO EXPAND THE METROIDVANIA CANON

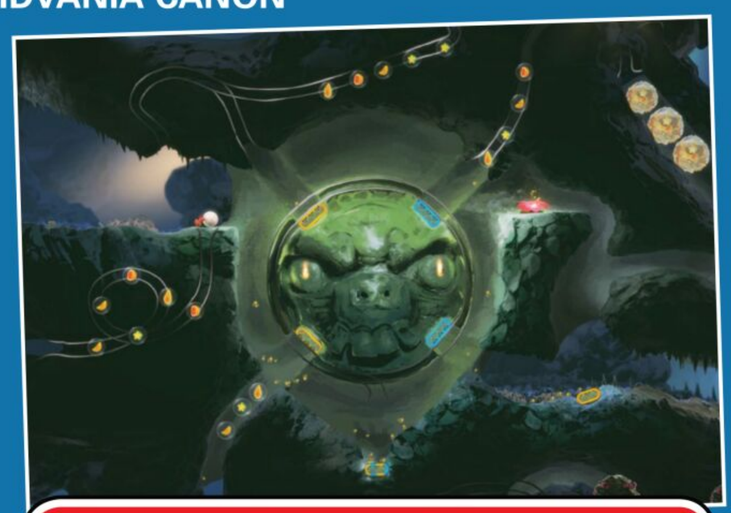
Wario Land 3

Owlboy developer Simon Andersen cites this 2000 Game Boy Color title as one of his favourites. "While its levels were separated by a select screen, you were essentially exploring open dungeons that were unlocked as you gained new abilities. It's also completely unique in that you had no form of health, allowing you to be crushed and moulded into new shapes by the environment to get to new locations".



Arac

Also known as *Spiderbot* in the US and Taiwan, this 1986 C64 proto-Metroidvania is unusual in that you had to acquire new exploration abilities by capturing animals. The robot you control can fire a net to capture creatures and then harness their talents to dig, jump higher and so on.



Yoku's Island Express

This 2018 title from Villa Gorilla is proof that you can actually merge the Metroidvania with other genres. It is essentially a pinball game melded with the exploration and platforming you'd expect from a Metroidvania. An unusual combination, but one that works fantastically well.

Developer INTERVIEW

SIMON ANDERSEN • ART DIRECTOR AT D-PAD STUDIOS

WHAT APPEALS TO YOU ABOUT METROIDVANIAS AS A PLAYER AND DEVELOPER?

I have always been drawn in by bizarre worlds that you're able to understand more of the deeper you look. While I don't mind being led towards a conclusion, there's something really satisfying about being lost in a place that fascinates, letting you choose a path that could lead to more answers. The challenges also tend to be tied to the games' central mechanic, so there's less of a need for arbitrary compensation challenges like fetch quests or escort missions. It's taking the best parts of a combat platformer, but letting you take in and learn about the areas you would otherwise sprint past in more linear experiences.

OWLBOY APPEARS TO BE A GAME WITH RETRO INSPIRATIONS. TO WHAT EXTENT WERE OLD METROIDVANIAS LIKE *METROID* AN INFLUENCE ON IT?

Owlboy was in large part created as a means to explore what could be done with pixel art back when the medium was on a fast track to being declared obsolete. Part of that thought process was considering what advantages it had, and one thing that stuck was flight. The rumour of a 3D *Kid Icarus* game was circulating, and our idea was that it would be a lot easier to fly around a crowded corridor if you could see that corridor from the side in a 2D perspective. *Kid Icarus* on the NES also served as a bedrock for that idea. What if you could play through its vertical structure, but be able to freely move back down? Enter all those hidden doors? Go into whatever dungeon you wanted without it being linear?

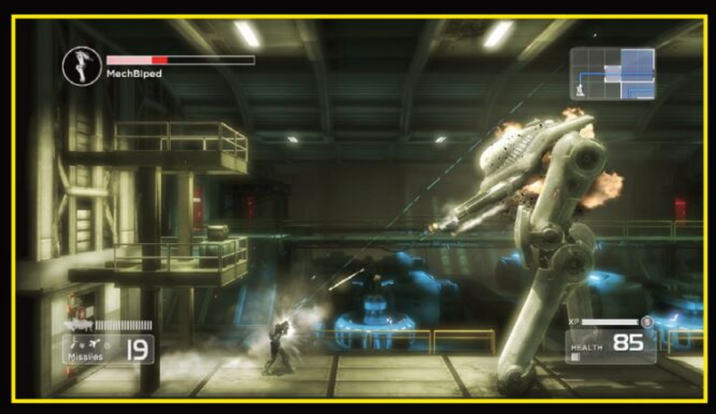
Two other games that had major influences were *Chrono Trigger* and *Majora's Mask*. In both games, there was a central threat that was being built towards and was known to the player, but the games were really about discovering more about the world's people and your closest friends.

WHAT ARE ONE OR TWO OF YOUR FAVOURITE METROIDVANIA GAMES AND CAN YOU EXPLAIN WHAT YOU LIKE ABOUT THEM?

Metroid Fusion, which I absolutely love. The space station setting allowed for a lot of variation in terrain and playing on the mixture of technology and nature. The SA-X encounters were very striking, and returning to older areas and seeing how they had changed really captured you in the moment.

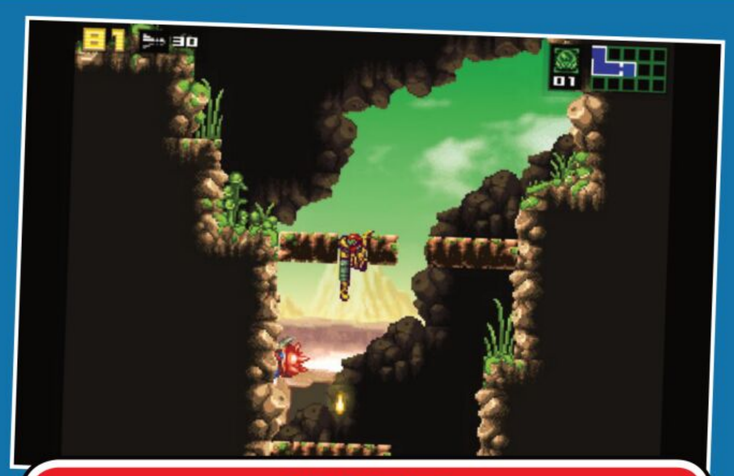
I'll throw in a curveball as well. While not completely open as you still had to select missions, *Megaman Zero* and *ZX* were two really interesting dives into the genre that I really enjoyed. It took the fast paced elements from the *Megaman X* series and gave some breathing room to focus on story and time to take in what the world you were exploring was meant to tell you.

▶ primarily led by indie developers. "While it's difficult to say for certain, I suspect *Cave Story* had a major influence in its revival," says Simon, referring to Daisuke Amaya's retro-inspired cult hit, originally released in 2004. "*Cave Story* was often pointed to as the first 'indie' game in the sense that people know it now. Having a long development cycle, being created by a single person, and achieving mainstream success. If you look at a lot of the independent studios



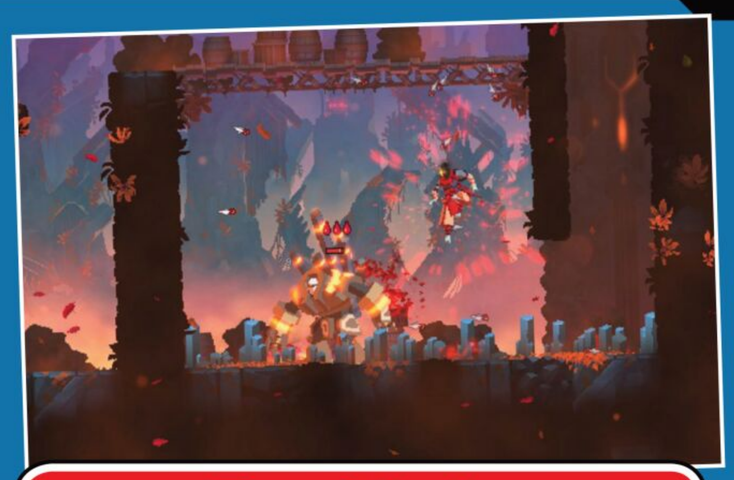
» [Xbox 360] *Shadow Complex* was one of the big early hits for Xbox Live Arcade.

» [PC] Spending a decade in development made you wonder if *Owlboy* could meet the level of anticipation. Thankfully, it did.



AM2R

Created by Milton Guasti, otherwise known as DoctorM64, *AM2R* (*Another Metroid 2 Remake*) is an unofficial remake of *Metroid II: Return Of Samus*, done in the style of *Metroid: Zero Mission*. Nintendo wasn't too happy about it, but the decade long project has been highly praised by critics and helped land its creator a job at the developer of the *Ori* series, Moon Studios.



Dead Cells

Given the importance that level design and the way that links to your abilities in Metroidvanias, you would think that developers would need to maintain an iron hand over the structure of the game world. *Dead Cells* shows that that's not the case, mixing the procedural generation of roguelikes with the exploration of Metroidvanias. It sounds like it shouldn't work, but it does.

"THERE'S A WEALTH OF TITLES IN 3D AND OTHER 2D PERSPECTIVES THAT CONTAIN ELEMENTS FROM METROIDVANIAS THAT MUTATE INTO NEW FORMS"

Simon Andersen

that popped up during that time, many felt they now had an example of home tools allowing you to achieve your dreams.

"Most indie developers relied on pixel art as it was what the tools could allow, and that lent itself to abstract spaces. Considering how few resources there were, most had to figure out things from scratch, and ended up experimenting with games based on basic movements and iterating from there. For people that wanted to make stories, detailed worlds and a sense of scale, starting out with platform movement, a Metroidvania is a pretty natural fit for those ideas. If you look at the timeline, after the release of *Cave Story*, multiple, almost decade-long projects emerged who all have Metroidvania elements in one way or another."

Indeed, as we reached the end of the Noughties, there was a growing glut of great indie Metroidvanias. Chair Entertainment's *Shadow Complex* was a huge success for Xbox Live Arcade when it released in 2008 (though admittedly, having been acquired by Epic Games before its release, they were technically no longer an 'indie') and was followed by another successful Xbox Live Arcade title featuring anthropomorphic creatures in the form of *Dust: An Elysian Tail* (2012). The following year we got Drinkbox Studio's Mexican-inspired luchador title *Guacamelee!* and part-*Minecraft*, part-Metroidvania 3DS and PC game *Steamworld Dig*. Thomas' atmospheric and

innovative *Axiom Verge*, *Ori And The Blind Forest* and *Environmental Station Alpha* followed in 2015; D-Pad's pixel-art delight *Owlboy* in 2016; *Hollow Knight* in 2017; *Steamworld Dig 2*, *Guacamelee 2*, *Dead Cells*, *Iconoclasts*, *Yoku's Island Express* and *The Messenger* all hit in 2018; Koji Igarashi returned with his Kickstarter funded *SOTN* spiritual successor *Bloodstained: Ritual Of The Night* in 2019, along with *Gato Roboto*, *Headlander* and Blasphemous; and we've had *Ori And The Will Of The Wisps* and *Carrion* in 2020. In short, Metroidvanias have made a stunning return to prominence.

Metroidvanias are not only back in full force in their 2D sidescrolling form, but have had a profound impact on big-budget 3D games. As well as superb 3D examples of the genre – most prominently, the *Batman: Arkham* series – they have had a broader influence on modern game design. "Even while they might not be pure Metroidvanias, we see a lot of design elements lifted over into AAA games today, as general

» [PC] Take a dung beetle delivering post, add in some pinball mechanics, and somehow you get a fantastic Metroidvania.

'good design'," Jens argues. "The whole *Dark Souls* series is very Metroidvania-like, and many of the big open-world games have Metroidvania elements."

Arkane Studio's 2017 game *Prey* is another great example, cited by Thomas as one of his favourites. "It's got a lot of Metroidvania-style exploration but it also lets you go off the rails to a large degree and do stuff you 'shouldn't'. It's fascinating to me how there are things within the skill tree that open up exploration even further – like the high jump or the ability to open up higher level security doors – and the skill points themselves are found largely by exploring."

"There's a wealth of titles in 3D and other 2D perspectives that contain elements from Metroidvanias that mutate into new forms," says Simon on the state of Metroidvanias today. "If you really squint your eyes, even games like *Dark Souls* share a lot of this DNA with an interconnected web of paths, optional encounters, progressing upgrades and a depth to the universe hidden in its structure rather than through blatant narration. Where would one put *Blasphemous* on that spectrum? Or *Carrion*? How would you feel about *Hyperlight Drifter* if it was a sidescroller? It's easy to try to think of new ways to categorise these differences, but to me, the important thing in all of this is that we discovered something new, and that element could enrich new experiences in surprising ways." ✱

THE UNCONVERTED

Arcade games that never made it home

DRIFT OUT '94: THE HARD ORDER

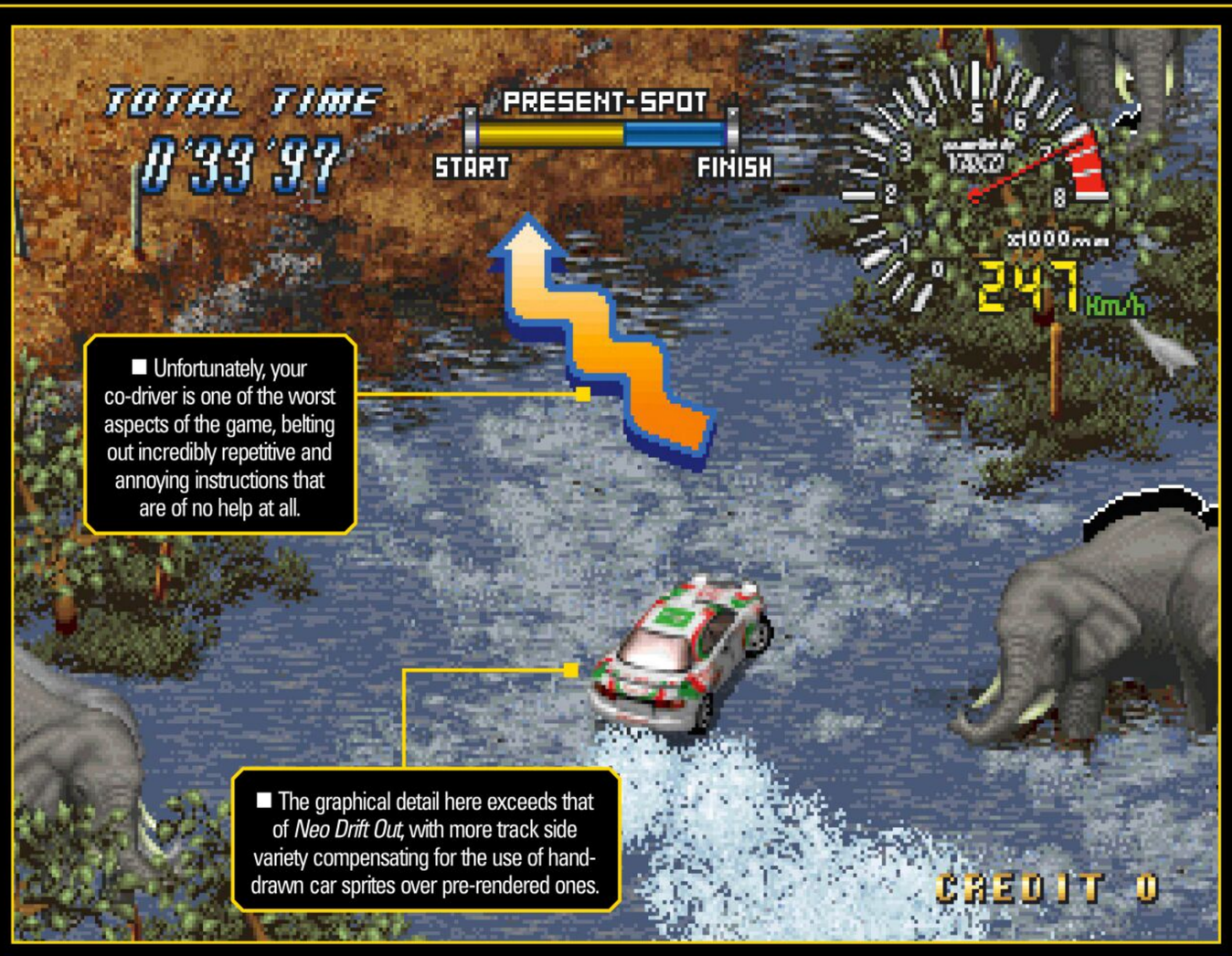
DEVELOPER: **VISCO** YEAR: **1994** GENRE: **RACING**

■ **Here on Retro Gamer, we're big fans of *Neo Drift Out*.** The fast-paced rally action is highly unusual on the Neo Geo, and the game is deservedly recognised as a highlight of that system's software library. However, it's worth pointing out that Visco's cult favourite has a lesser known predecessor, one that has plenty of interesting features that never made it into the more famous game.

Drift Out '94: The Hard Order is a rally racing game that abandoned the top-down perspective of the original *Drift Out* for a three-quarters perspective. Your goal is simply to get your car to the finish line before the timer runs out – though of course this is made more complex by rival racers, forking paths, tricky turns and unfavourable terrain. A variety of real rally cars are available including the Toyota Celica, Subaru Impreza, Lancia Stratos and Audi Quattro.

A few things set *Drift Out '94* apart from its sequel. For a start, races have two legs, extending the length of the game by a fair amount. Additionally, the Super Special Stage races pit you against a rival driver on adjacent tracks. More interestingly, the game boasts greater variety in its background graphics, as well as track features such as tunnels, and even night time driving with the track illuminated by your car's headlights. The only thing that's really missing from the Neo Geo game is the sprite scaling.

Unfortunately complexity is not always a good thing, and *Drift Out '94* does suffer from it in certain ways. The extra detail and lack of scaling make the tracks harder to read at high speeds, which is a problem when your car rolls as easily as the ones in this game do. The difficulty level is pitched probably just a bit too high, and the handling never feels quite as good as it does in *Neo Drift Out*. Despite those negatives, it's a shame that this game never came home – it's a classic example of a fun 2D game that the 16-bit consoles couldn't have pulled off faithfully, and wouldn't have impressed on the 32-bit machines.



■ Unfortunately, your co-driver is one of the worst aspects of the game, belting out incredibly repetitive and annoying instructions that are of no help at all.

■ The graphical detail here exceeds that of *Neo Drift Out*, with more track side variety compensating for the use of hand-drawn car sprites over pre-rendered ones.

■ Night driving sees the track darkened, illuminated by your car's headlights and little else. It doesn't add much difficulty but it's a very cool visual effect.

■ *Drift Out '94* features a good range of cars, and keeps the British end up by including the Mini Cooper – something of a throwback to the Sixties rally scene.

CONVERTED ALTERNATIVE

NEO DRIFT OUT

1996

■ *Drift Out '94*'s more famous younger sibling offers similar thrills, despite being simplified in some ways. The only home version was released for SNK's Neo Geo CD, and it's now an expensive game due to being sought after. You may have to pay up, as licensing is likely to prevent further ports.

J-LEAGUE SOCCER V-SHOOT

DEVELOPER: **NAMCO** YEAR: **1994** GENRE: **SPORTS**

■ **The early Nineties was a golden age of interest in football in Japan, as the newly established J-League gave the nation its first professional football competition.** To capitalise on this wave of enthusiasm, Namco produced this licensed game featuring real J-League teams and players. It's a pretty standard arcade football game for the era with a perspective and gameplay style that are similar to SNK's *Super Sidekicks*, released a couple of years prior. It offers a variety of competitions including a tournament and the J-League Cup, as well as support for up to four players.

It's easy to see why this didn't come home – Namco already had its own J-League Prime Goal series for the SNES, and didn't have a licence to publish J-League games on any other platform. It wasn't the most impressive arcade game anyway. Despite playing well enough and displaying some nice camera effects for throws and goal kicks, it was far behind the crop of arcade football games of 1994, including *Super Sidekicks 2*, Taito's *Hat Trick Hero '94* and especially Sega's *Virtua Striker*.

» [Arcade] JEF United's Pierre Littbarski has put it past the keeper, showing why he's their star player.

CONVERTED ALTERNATIVE

SUPER SIDEKICKS

1992

■ SNK's football game looks very similar to *J-League Soccer V-Shoot*, and plays alike too. As well as being available on the Neo Geo AES and CD consoles, the game is available on the Neo Geo Mini, and can be bought digitally on modern formats as part of the excellent *Arcade Archives* Neo Geo series.

CONVERTED ALTERNATIVE

GUNFORCE

1991

■ Many players know *Gunforce II* due to its staff connection to the *Metal Slug* series, but it was Irem's original game that came home to the *SNES* courtesy of UK developer Bits Studios. Like *Bay Route* it's an undistinguished entry in the genre, though *Gun Force* does have some vehicles to enliven things.

BAY ROUTE

DEVELOPER: **SEGA/SUNSOFT** YEAR: **1989** GENRE: **RUN-AND-GUN**

■ **Someone clearly saw Konami's *Rush'n Attack* and thought the pun was too subtle, and therefore we have *Bay Route* – because it's like Beirut.** Title-related silliness aside, this game allows up to two players to walk along, gunning down a seemingly endless supply of goons with a variety of weapons, before taking on some mildly inventive bosses like a floating snake-like thing. Unusually for the late Eighties, you can switch between weapons at will rather than obtaining them via power-ups, but you can collect power-ups to enhance them.

Unfortunately, it's no *Contra*. Attempting to aim diagonally results in an odd rotating motion, giving extra precision at the expense of the crucial ability to respond to threats immediately. It's not the prettiest game either. Had *Bay Route* achieved much in the way of arcade success, we would have expected to have seen a Mega Drive conversion as a matter of course at this point in time, so we're guessing it didn't perform all that well.

» [Arcade] Can you see the bullets here? We couldn't until it was far too late to do anything.

BEST LEFT IN THE ARCADE

BLASTED

DEVELOPER: **MIDWAY** YEAR: **1988** GENRE: **SHOOT-'EM-UP**

■ **Sometimes, a good game idea is just waiting for the technology to do it justice, and that's certainly the case with *Blasted*.** You play as a sniper, attempting to deal with a cyborg infestation in an apartment block by shooting small red power sources on the cyborgs' foreheads, which are annoyingly hard to hit.

A general overview of the building is displayed at the top of the screen and a close-up scope view at the bottom. The screen is always split for two players, who can do battle against one another from opposite buildings if they wish. This set-up isn't the most satisfying way to handle sniper duties and over a decade later Konami nailed the execution with its hit game *Silent Scope*, by replacing the joystick and buttons with a massive gun featuring a tiny second screen in the scope.

However, Konami never achieved the same acclaim with its home versions of *Silent Scope* due to the loss of the specialised peripheral, so really it's probably better for everyone that *Blasted* didn't receive a home conversion.

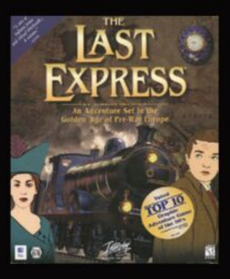
» [Arcade] When you do manage to hit the cyborgs, they do at least die spectacularly for you.

THE MAKING OF

THE LAST EXPRESS

MYSTERY, ROMANCE AND INTRIGUE ON THE LEGENDARY ORIENT EXPRESS. FORGET AGATHA CHRISTIE, JUST THIS ONCE. INSTEAD, TAKE YOUR SEAT AS THE WHISTLE BLOWS. THE LAST EXPRESS – ONE OF ADVENTURE GAMING'S ALL-TIME CLASSICS – IS ABOUT TO SET OUT ON A TROUBLED JOURNEY TO ISTANBUL...

Words by GEM WHEELER



IN THE KNOW

- **PUBLISHER:** BRØDERBUND
- **DEVELOPER:** SMOKING CAR PRODUCTIONS
- **RELEASED:** 1997
- **PLATFORM:** PC, MAC
- **GENRE:** ADVENTURE

Before the fabled Orient Express reaches its destination, some of its passengers will have met a gruesome end, while others will see their lives changed forever, as a fiendish plot threatens to bring about political chaos in Europe during the fateful year of 1914. American doctor Robert Cath only just makes his own date with destiny. It's up to us to ensure that he survives it.

Legendary game designer Jordan Mechner, building on an idea suggested by his cowriter, the late Tomi Pearce, established Smoking Car Productions purely to create this extraordinary game. It's a supremely innovative late-period entry in adventure gaming history that's never quite reached the audience it deserved.

Mark Moran was in charge of its programming and technical design. As a precociously talented 19-year-old who'd set up his own game company in high school, he was the youngest in a close-knit team of twenty-something developers. After leaving the game industry, he's since gone on to build a successful career in films as a producer and production manager. Speaking from his Los Angeles home, he's sanguine about *The Last Express*' disappointing reception. The game's lengthy development period saw it miss its original release date of Christmas 1995 by miles, but that extra time gave its creators an opportunity to work magic.

The Last Express was finally released at the end of March 1997, after a protracted QA testing process ironed out its many small bugs. Its US publisher Brøderbund's marketing team had quit shortly beforehand, the first in a series of hammer blows. After a succession of acquisitions and mergers, what had been the largest videogame company of the Eighties was soon bought by educational software firm, The Learning Company. The company's focus was now on 'edutainment' titles, and *The Last Express* wasn't part of the plan. Just two months after its release, the game that would win plaudits in end-of-year computer magazine awards had quietly disappeared from stores.

It was a far cry from the promising early days, when three companies had vied for distribution rights to the title. "Brøderbund had won this bidding war," Mark says. "Jordan had financed the first part of the game with money he had made himself from [his earlier Apple II titles] *Prince Of Persia* [1989] and *Karateka* [1984], so he was in a really good position, because we made it to the point where we had a playable demo that was really impressive and

» Mark Moran headed up *The Last Express*' programming and technical design.

DEVELOPER HIGHLIGHTS

KARATEKA
SYSTEM: APPLE II, VARIOUS
YEAR: 1984

PRINCE OF PERSIA
SYSTEM: APPLE II, VARIOUS
YEAR: 1989

PRINCE OF PERSIA: THE SANDS OF TIME (PICTURED)
SYSTEM: PS2, VARIOUS
YEAR: 2003

MEET THE CAST

Key passengers on the Orient Express

ROBERT CATH

■ Our dashing hero is a man with a storied past: an American doctor with a strong appetite for adventure. It's Robert whose shoes we find ourselves in as the journey begins. Will his skills of deduction rise to the challenge? Maybe, if we can just get him through those damned fist fights…

ANNA WOLFF

■ The glamorous Austrian violinist's presence on the Orient Express causes quite a stir. Her beauty and poise catch Robert's eye, but there's a lot going on beneath her sophisticated veneer. Anna, like the other passengers on this strange journey, is harbouring plenty of secrets of her own.

KRONOS

■ There's more than a touch of the *James Bond* villain about Kronos, a wealthy North African nobleman who travels in style in his own private rail car. Beat that, Blofeld! We're granted an audience with Kronos early in the game, but his true goals remain opaque until the story's final, dramatic moments.

AUGUST SCHMIDT

■ August is a industrialist and arms dealer, his fortune built on the Second Reich's growing military might. Tyler Whitney never makes it to their scheduled meeting aboard the Express, but Robert Cath does. The deal August had set up with our late pal is about to become rather complicated…

ALEXEI DOLNIKOV

■ This morose, Nietzsche-reading Russian is a political firebrand with a hatred of his country's power structure, despite his own aristocratic background. His troubled relationship with Tatiana Obelenskya and the count, her grandfather, soon draws Robert Cath's attention.

"WE SPENT A LONG TIME GETTING THAT ART NOUVEAU, ROTOSCOPED LOOK RIGHT"

MARK MORAN

wowed people. Electronic Arts and Brøderbund and [Japanese conglomerate] SoftBank Group and the major players of the mid-Nineties were all bidding on this thing."

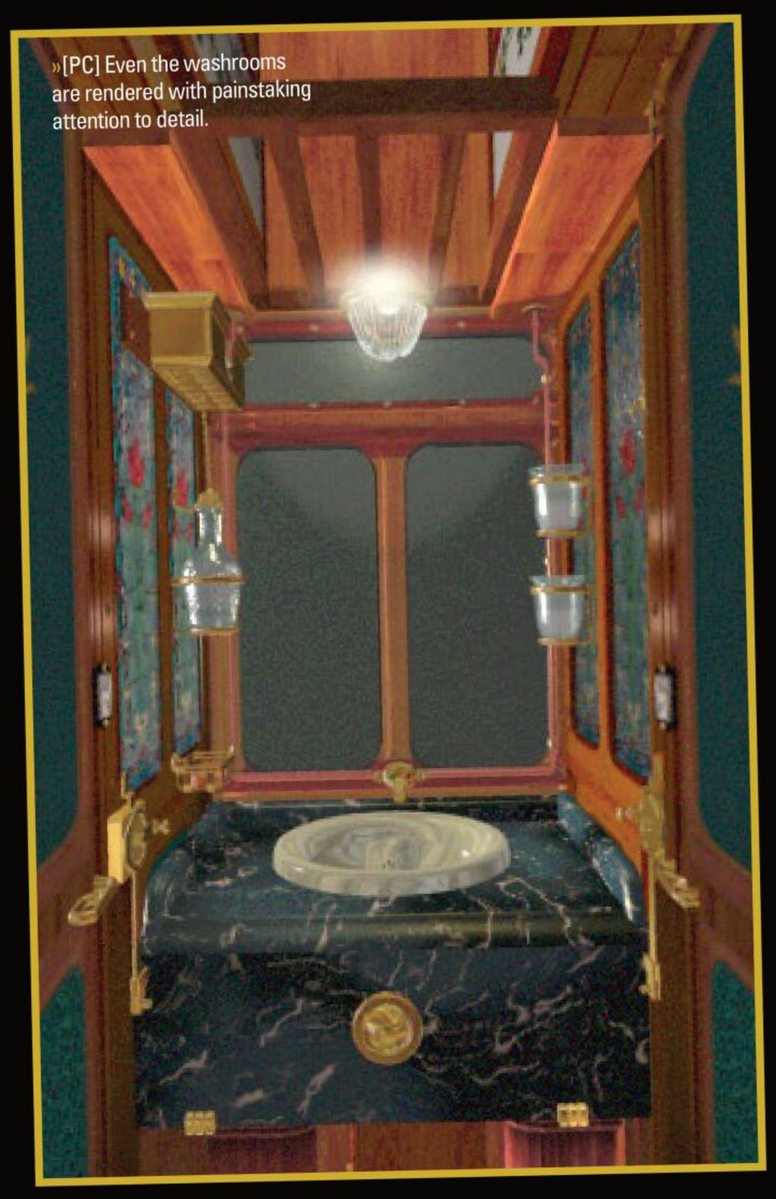
Mark remains saddened by the game's treatment on its release. "*Express* never had a Christmas season. It never had a chance to do those sales," he tells us. "It got tremendous reviews. That's why there's a group on Facebook called '*The Last Express* is the best game nobody ever played'! A year or two later, Interplay did some very cheap deal where they released it for six months, and it didn't really do anything for them. By this point it was 2000, and the world had very much moved on to real-time 3D games."

The game takes place in the relatively confined space of the train's carriages, but its technical demands required time. Lots of it, in fact. "We spent a long time getting that Art Nouveau, rotoscoped look right," Mark remembers. "From a technical point of view over a four-year period, the first two years were spent on figuring out the look and the 'image' of the game, and the second two years figuring out the character logic. With hindsight, I'd say no, let's get the character logic right, because when we were figuring out the look of the game – from 1993 to, let's say, the end of 1995 – at that time, that was the right look for the game. It ▶

» [PC] Not the best way to start your trip, is it?

» [PC] A cast of fascinating characters go about their business in real time.

» [PC] All aboard for a journey into danger.



»[PC] Even the washrooms are rendered with painstaking attention to detail.

was *Myst* with people moving at full motion, very fluid, with these cool, kind of stylised, cartoon conversations where you didn't have to watch a really weird loop of someone eating. We purposely chose not to animate those at full speed. When they're walking up and down, they're walking at full speed, but when they're sitting or eating or drinking, it's actually just doing a couple of frames a second."

The Last Express contains a number of minigames, some of them infamous. "There are these five fight sequences, which some people hate, as for a few minutes, it becomes a different style of game, where you have to have reflexes!" Mark tells us. One particularly innovative feature of *The Last Express* was the now-ubiquitous automatic save function. Smoking Car Productions dispensed with the 'save early, save often' mantra in favour of turning back the hands on the game's jewelled clock. This enabled the player to redo an earlier action or to check out what else was going on while they'd been exploring another section of the train. "When we started working on that, I believe we were the only game that had ever saved for you," Mark explains. "There are no save slots. Our idea was really simple: that's not fun. We just wanted it to be like watching a movie, where you rewind if you want to do something different. Jordan continued that idea into *Prince Of Persia: The Sands Of Time* [2003], very much with the idea of rewinding the clock and changing the outcome."

> "WE JUST WANTED IT TO BE LIKE WATCHING A MOVIE, WHERE YOU REWIND IF YOU WANT TO DO SOMETHING DIFFERENT"
> **MARK MORAN**

The game's atmosphere was enriched by its authentic foreign-language dialogue, acted by native speakers of French, German and Russian, among others. "Jordan had lived in Paris, and he wanted to do eight different languages and recreate this experience of riding on the Orient Express in 1914, when there are all these different languages and cultures clashing." Mark feels, however, that the choice of a pre-World War I setting hurt the game's commercial chances, as that volatile period in European history doesn't resonate with most modern-day Americans. He still considers that the game's rich influences from film noir and the espionage genre hold up, citing films like Carol Reed's *The Third Man* as influences. "There's that trope of the innocent American who doesn't understand all the politics, who's sucked into this European conflict. There's a line in the game where Anna Wolff says something like, 'My people have been fighting for 1,000 years – you could never understand.'" An incredibly haunting score by Czech composer Elia Cmíral, who later scored films such as *Ronin* and *Stigmata*, enhances the pervading sense of melancholy and loss.

These were game designers working as filmmakers, tasked with crafting a cinematic plot within the limitations of the videogame format. "For that, we brought up people from Los Angeles who had experience with film: assistant directors, line producers and production managers, and then integrated them into what we were doing and brainstormed," Mark recalls. "There were things that had never been done before. For example, you can stand anywhere. In a movie, a big part of a director's decision is where to place the camera to achieve the most dramatic effect. In a videogame, even one that's not real-time, the character could be standing in 20 different spots to see someone going out of a door, and so we have to film it from 20 different angles. In order to

» [PC] Robert Cath's journey on the Orient Express isn't quite as comfortable as he might have hoped.

» [PC] Characters' complex motivations are a source of intrigue.

» [PC] The amount of research that went into this game is evident on every screen.

» [PC] The titular train makes quite a few stops on its journey to Istanbul.

» [PC] Robert finds himself in a number of sticky situations.

maximise the efficiency of that, we said, 'Well, what if we took two cameras and point them at each end of the corridor?' You can't, because one camera can see the other camera. So we said, 'We're doing this all on blue screen – what if we built boxes around the camera, around the crew that operates them, and have a changing screen with a piece of plywood all the way around and a hole cut out for the lens?' The only thing the camera would see is the other camera's lens, and then we could have the software just erase that lens."

The actors who played the Express' passengers faced their own challenges. "In order to create that look, we did a lot of research and tests of what they needed to be wearing," Mark tells us. "They were garish costumes, purple and orange, just the gaudiest things. A jacket would be purple on one side and orange on the other so that the computer would be able to tell where one flap met. Every single line was a big piece of felt. They almost looked like cartoons when they were on set! It was very hot, because you're caked in theatrical makeup and you're wearing these wigs that accentuate the colours in your hair, so the computer can find those and highlight a curl or a parting. Another thing to remember is that they're doing all these scenes as a silent film shoot, as we're doing all the voices separately. It's a different person who does the voice of Cath [CW Morgan] than does the visual of Cath [David Svensson]." Some actors did voice the characters they embodied in the game, but for the most part, the roles were distinct. Mark muses about whether these actors feel more connection to the roles, "Maybe they have a little more ownership, more of a feeling of, 'Hey, that's me!'"

Art director Nicole Tostevin headed a team responsible for rendering the fabled train's beautiful, period-appropriate decor. While Jordan Mechner was mulling over the initial idea, he'd done some impressive research that would add realism to the game's immersive aesthetic. "He tracked down these train enthusiasts in Paris, and he and [3D art director] Patrick Ladislav went and found the two remaining cars," Mark remembers. "One was in Athens, and one was in Budapest, I think. They were both in different states of disrepair. One was a sleeping car, and the other might have been a dining car. I never saw those two cars – they both saw those before production started on the game, I think in 1992."

As Mark is quick to point out, it's easy, with hindsight, to identify where time could have been saved, and it's tempting to wonder whether a timelier release could have won the game the commercial success it merited. Looking back on his teenaged self's adventures in game development, though, Mark can't imagine another version of this most idiosyncratic of titles. *The Last Express* didn't come into the world fully formed, and its protracted development was a rewarding voyage of discovery. In Mark's own words "you find it in the process". He retains fond memories of the learning experience that set him up for a long career in movies and yielded one of adventure gaming's most lauded classics.

Like most works of art, *The Last Express* was ahead of its time. The game's ardent fans – such as that one passerby in New York City who recognised Mark's *Last Express* jacket, or the young developers who gush to him about its influence on their own careers – are just grateful to have been invited along on this unforgettable journey. ✱

ENHANCING THE EXPRESS

Back on board for a new experience

After a 2011 *Collector's Edition* re-release by French publisher Dotemu, Jordan Mechner – who'd by then reacquired the rights to the game – and Mark Moran assisted the company with iOS and Android ports. In 2013, a *Gold Edition* on Steam (released on macOS two years later) added a more intuitive user interface, along with the iOS version's enhanced hint system, achievements and cloud save support. Adventure game fans were overjoyed, and critical reception was, as always, enthusiastic.

Its commercial performance was a major letdown, though. "It didn't sell very well," Mark laments. "Jordan spent time working on a new hint system that made it easier and more fun to play. I helped the programmers with all the source code and the documentation, although they were able to do most of that on their own. I don't think it ever sold enough to justify the work they did, even making the iPad version." A mooted big-screen version, helmed by Paul Verhoeven, never got far enough down the tracks for a star to be attached but was a serious possibility back in 2011. Once again, the ill-fated train seemed to have missed its moment.

In fact, the iOS version of *The Last Express* wasn't the first attempt to port the game. Back in the early days, SoftBank Group, via its subsidiary GAMEBANK (a joint venture with Microsoft), had funded a Sony PlayStation port that was being developed in-house to the tune of $2.5 million, while a Sega Saturn version was delegated to a British company. SoftBank "basically got out of the game business", when it realised that game development wasn't quite the safe bet it had imagined. After an unsuccessful attempt to recoup its money, SoftBank pulled the plug. Mark still has code from both the unfinished console ports, noting that the Saturn version wasn't quite as far along when it was cancelled.

HEALTH
90

Doom 64

I NEED GUNS, LOTS OF GUNS

» N64 » 1997 » MIDWAY STUDIOS SAN DIEGO

Earlier this year I finally had a chance to play *Doom 64* and it was bloody good fun. I'd completely ignored it on release because I was hyped for the incoming release of *GoldenEye* and it hadn't been getting particularly amazing reviews. Now that I've played it, I regret waiting so long, because it really is a fantastic first-person shooter, and in some ways it's actually better than Rare's magnum opus.

Doom 64 works so well today, because it remains such a pure shooter. Back in 1997 it must have felt rather basic because it lacked the multiple missions and even multiplayer that was being promised by the likes of *GoldenEye*. You'd flip a switch to access a new area or find a new weapon and that was about it as far as complex mechanics went.

Playing it earlier this year and the basic nature of *Doom 64* wasn't an issue, and that's largely down to the game's level design, which is one of the best in the series. Yes it won't trouble the original work of John Romero in the first two *Doom* games, but I've never played another *Doom* title where the maps are so satisfying to navigate and solve, and it's possible I never will.

Another reason I ignored *Doom 64* on release was because I thought it was just the original *Doom* and (as good as that was) that wasn't what I'd bought my new N64 to play. Of course, now I know it's actually a brand-new game with completely different levels and new visual designs for the monsters and weapons. There's even a new weapon, the 'Unmaker' a powerful laser which was originally planned for the first *Doom* game, but didn't make the cut.

It really comes into its own on 'The Absolution' which is *Doom 64*'s final level and is shown off on this very spread. It's an insane gauntlet of enemies, which spawn from three portals (discovering secret keys will turn these portals off, making your battle a little easier) and it is an absolute bugger to clear. Fortunately, the Unmaker lives up to its name and with a little practice (as well as a fair amount of luck) you'll be able to clear the demonic hordes and access the final boss.

While the original game is now rising in price, an enhanced version does exist for all contemporary systems, so if you don't own an N64 now, there's no reason not to experience this wonderful FPS. ✱

THE MAKING OF SPYRO

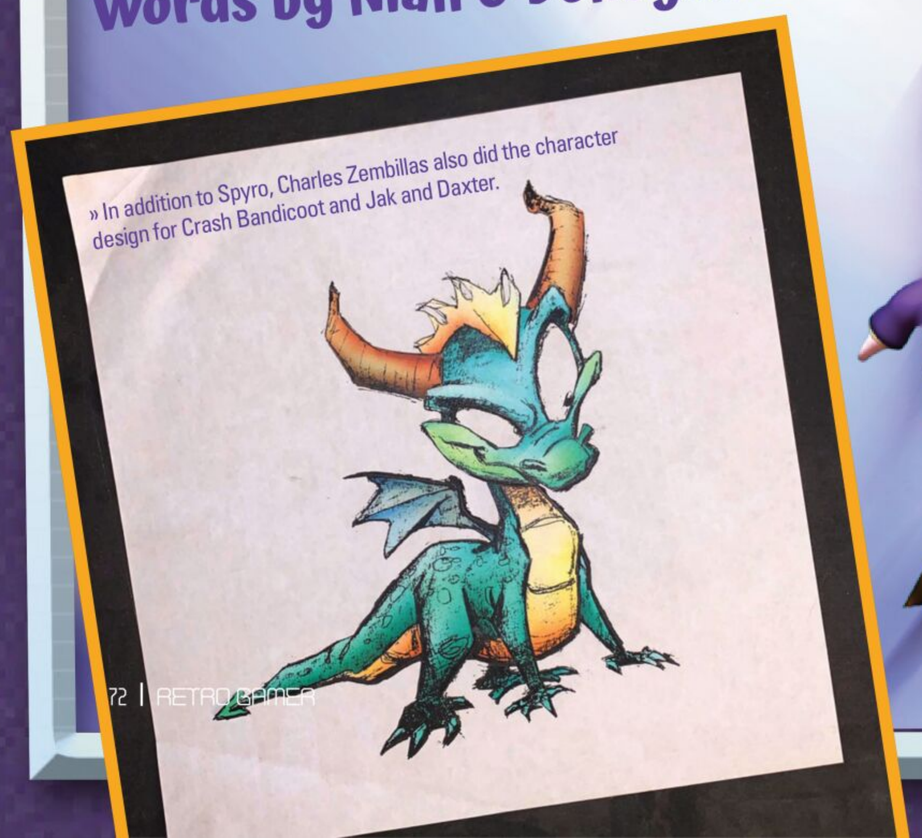
YEAR OF THE DRAGON

SPYRO: YEAR OF THE DRAGON MARKED THE TAIL END OF A SERIES THAT DEFINED GAMING FOR AN ENTIRE GENERATION. WE CAUGHT UP WITH SOME OF THE TEAM OVER 20 YEARS AFTER ITS RELEASE TO FIND OUT MORE ABOUT INSOMNIAC GAMES' PLAYSTATION SWAN SONG

Words by Niall O'Donoghue

IN THE KNOW

- **» PUBLISHER:** SONY COMPUTER ENTERTAINMENT
- **» DEVELOPER:** INSOMNIAC GAMES
- **» RELEASED:** 2000
- **» PLATFORM:** PLAYSTATION
- **» GENRE:** PLATFORMER



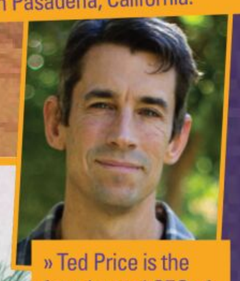
» In addition to Spyro, Charles Zembillas also did the character design for Crash Bandicoot and Jak and Daxter.

» [PlayStation] Programmer Matthew Whiting used his previous experience as a NASA scientist and as an engineer to inform Spyro's gliding mechanics.

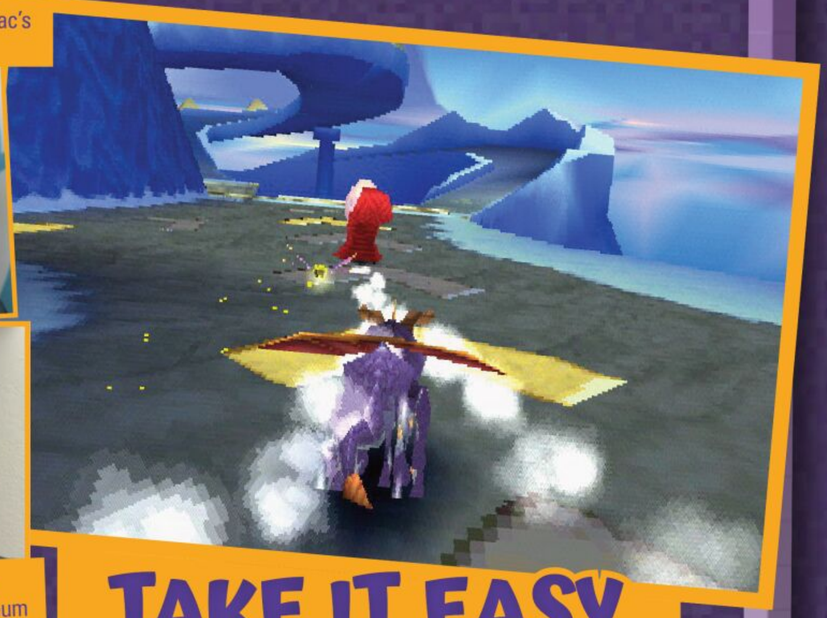
» [Playstation] Michael John based this level, Sunny Villa, off the Piazza San Marco in Venice.

» Brian Hasting is Insomniac's chief creative officer.

» Craig Stitt works at the Kidspace Children's Museum in Pasadena, California.



» Ted Price is the founder and CEO of Insomniac Games.



» Not every enemy design made it into the final game. Here's a look at the fearsome looking Fairy Eater.

Playing *Spyro: Year Of The Dragon* is a joyful experience. Exploring its brightly coloured levels with Stuart Copeland's legendary soundtrack in the background, either as the iconic purple dragon or one of his new playable companions, has a timeless pleasure. Simply smashing a pot, collecting the shiny gem inside and seeing a gold number pop out is a compelling feedback loop that still hooks you in over 20 years later.

However, Insomniac didn't need to wait two decades to see how beloved its game would be to a generation of children. Designer Caroline Trujillo, now an executive producer at Asobo Studio, remembers going to playtests where children played the game. "Most of the time there were kids that would just run around and they'd scream with laughter, running around in circles, just because they're watching Spyro's butt tail wag," she tells us. "There was nothing more charming than that, to know that you could make people happy just by running around."

Spyro: Year Of The Dragon is the biggest game in Insomniac Games' PlayStation trilogy, containing four homeworlds, five new playable 'critters' and a plethora of minigames, all developed in just ten and a half short months. *Spyro 2: Ripto's Rage!* was developed to improve on the success of the first game, but Insomniac decided to take a different approach for *Year Of The Dragon*. "We really wanted to make this a masterpiece, we really wanted to make everything special," chief creative officer of Insomniac, Brian Hastings reveals. "There's something unique and memorable in every part of it that's different from everything else."

Insomniac Games worked with Universal Interactive Studios at the time, having been headhunted by Mark Cerny, developer and system architect for various Sony consoles, in 1994. Before this, Insomniac CEO Ted Price had little experience in game development but partnered with Insomniac chief architect Alex Hastings to develop an early prototype of their first game, the *Doom*-inspired *Disruptor*. After being turned down by a variety of publishers, including Sony, Mark saw their VHS demo. "I was just blown away," Mark admits. "I mean here's two people with no background in games that have done something that looks like, with proper art staff … [it] could really be successful."

After releasing *Disruptor* and the first two *Spyro* games, the team began work on *Year Of The Dragon*. The addition of critters was a feature born out of necessity. "It was an acknowledgement of Spyro's limitations as a character ... we had taken Spyro pretty much as far as we thought we could, given that he doesn't have hands and can't hold things," Ted tells us. "We didn't want to add new flame abilities or traversal abilities that felt like they had diminishing returns – we thought it was better to bring in characters that allowed us to create fresh, new twists on gameplay."

When designing new characters, Insomniac would focus on what type of gameplay they wanted to create and then figure out how to make characters fit the world visually. Animators built and rigged characters rapidly, with Ted saying that they took new critters from a concept to a prototype in days. Designer Michael John, now a teaching professor at the University of Santa Cruz in California, shares notes from the brainstorming of Sheila, the friendly kangaroo critter that features in the game. They were looking for inherently fun actions the player could perform with this character – things like 'jump up and kick a dude', 'trampoline jump' and 'stomp dude'. "You figure all of that out first, '[this is] exactly how high

TAKE IT EASY

HOW SPYRO WAS DESIGNED TO BE BEATEN BY ANYBODY

The *Spyro* series is easy going and inviting to new players, something that was intentionally planned. For example, the camera swings around Spyro as he moves to stay focused on where the player was going. "The principal was that you could play the game without ever manually moving the camera," Matthew Whiting, now a senior lecturer at the USC Viterbi School of Engineering, tell us. For example, whirlwinds always leave players facing exactly where they need to go next.

Matthew also pointed to 'boss cam', which keeps both bosses and Spyro in frame at all times, letting you focus on dodging projectiles and attacking. Matthew credits Mark Cerny for the "radical" idea for *Spyro* to not have strict game over states. You pick up from pretty much where you left off if you die, and the player is sent back to the beginning of a hub area with all their lives replenished if they get a game over. "[Mark] really had this vision – this was a game for younger folks … and they're not playing it for the challenge, they're playing it for the enjoyment of it," Matthew says.

Spyro also has an 'automatic combat tuning' system that adjusts difficulty on the fly, which Matthew credits to Brian Hastings. For example, if you keep failing to catch an egg thief, they'll gradually get slower. If you die repeatedly, enemies will have slower attack animations. "The minimum completion level had to be achievable by anyone," Matthew says.

MINIGAME MADNESS

A WHISTLE-STOP TOUR OF SPYRO'S SIDE-ACTIVITIES

SKATEBOARDING

Spyro can pull off flips and tricks in these skate parks – in Sunny Villa, you can win dragon eggs for clearing out lizards as fast as possible. The original version of this fun diversion had Spyro riding a literal 'skate-squid', which can still be accessed via a cheat code.

YETI BOXING

Using Bentley, you have to out-box a yeti over the course of three rounds, mixing attacks with carefully timed blocks. Caroline thinks that the fighters may have originally been teddy bears, until someone suggested the return of the yeti from *Spyro 2*.

SPARX SHOOT-'EM-UPS

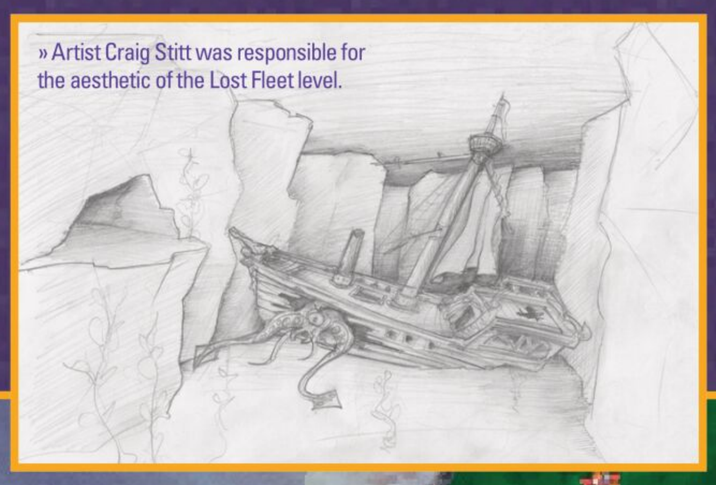
These top-down levels give Sparx his moment in the spotlight. You have to explore dungeons and fight through waves of enemies using your basic projectile attack, a charge dash and limited use power-ups like rockets and spread-fire.

DOWN BELOW!

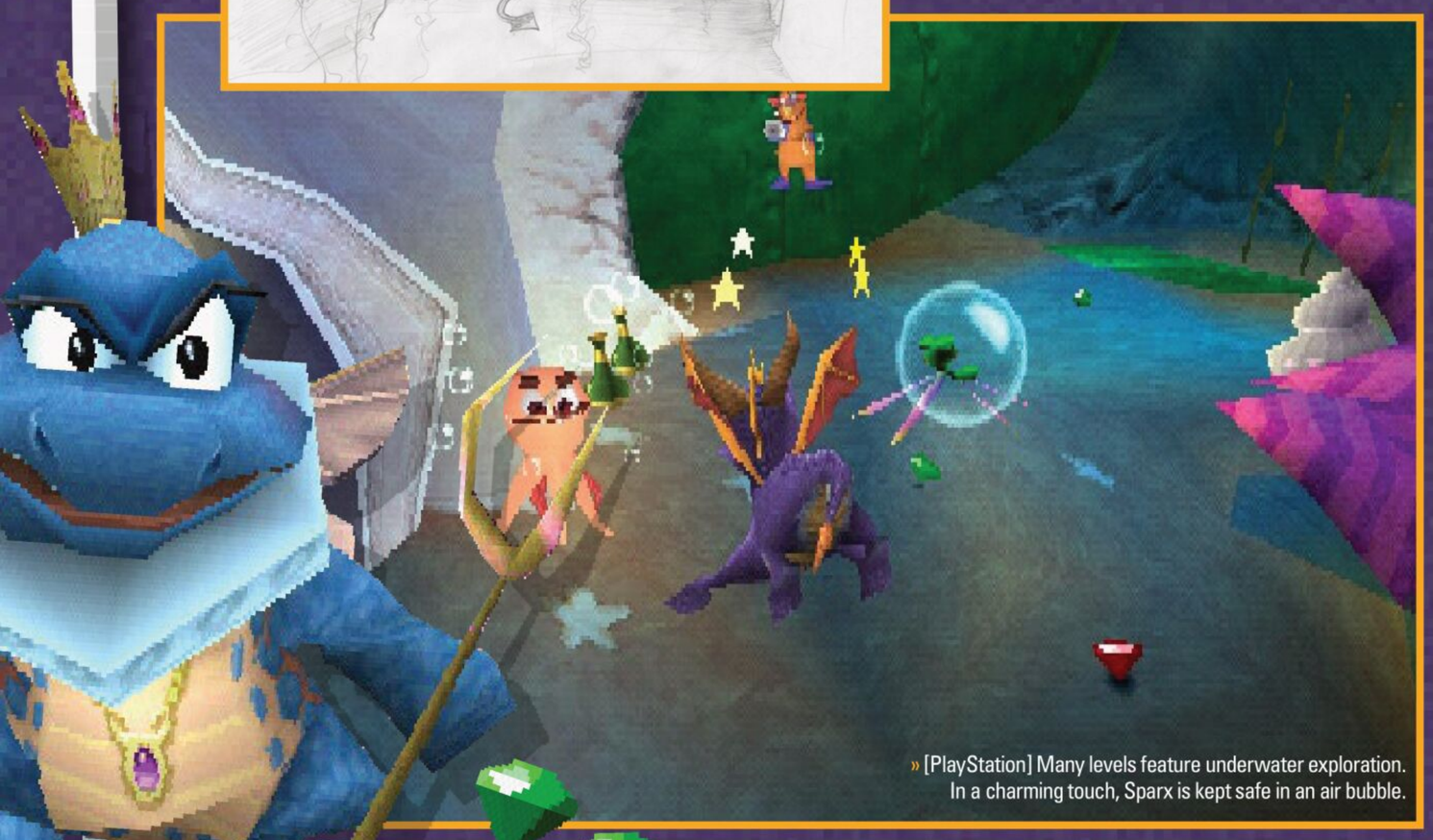
This feathery fighter completely mixes things up by introducing hovering mechanics and letting you take to the skies. You explore levels, hunting down enemies with your BAM launcher [Bird to Air Missile] to rescue dragon eggs.

▶ the character can jump, this is exactly what are some fun things to do, this is then a sequence of things that would be interesting and fun to do' … now I go lay out the actual levels," Michael says.

Each character posed unique challenges, like the flying penguin Sgt Byrd. Michael originally envisaged Spyro as a flying character and never let go of the idea of an airborne critter. "I had spent two years thinking through some of these problems of like, 'how do you keep him constrained inside a space when he can just fly anywhere? What is the gameplay if you can just jump and fly away from everything? How is it still dangerous?,'" he says.



» Artist Craig Stitt was responsible for the aesthetic of the Lost Fleet level.



» [PlayStation] Many levels feature underwater exploration. In a charming touch, Sparx is kept safe in an air bubble.

Other games proved to be a useful reference point for Insomniac – for example, programmer Matthew Whiting had previously worked on a helicopter game, *Black Dawn*, helping them design interesting levels for the propelled penguin to explore.

Mark worked alongside Michael on the game with his company Cerny Games. He had played a large role in developing the previous *Spyro* games but had a more hands-off role for *Year Of The Dragon*, reviewing design documents, development milestones and analysing level layouts at the paper stage. Mark remembers being initially concerned about the addition of the critters, since it looked to be a big challenge. "They were committed to it and they made it work," Mark says. "I think this is the real aspect that really distinguishes *Spyro 3* from the other games in the series." However, Mark was aware of the danger of forgetting what made the original *Spyro* work so well, "Don't get too long, make sure that the enemy locations are approached with a certain degree of intentionality, make sure to smoothly intermix platforming and combat."

Understanding these fundamentals allowed Insomniac to create core levels quickly. The target audience for *Spyro* was young and Caroline wanted levels to feel safe, a decision that informed their 'horseshoe' design – Insomniac never wanted players to feel lost. It was therefore crucial for levels to be filled with 'weenies', distinctive landmarks that guide players like a lighthouse or a giant statue.

Designers like Caroline were heavily involved with almost every stage of a level's design. Artists would give Caroline environment concepts, leaving her to outline levels on paper. She then mocked up areas, scripted end-of-level sequences and did some coding. "We called it 'Renaissance game development' because everybody was wearing multiple hats, everybody had to do more than one skillset," she reveals.

Maps were initially graphed on paper, with an overview of the landscape and architecture of a level, leaving artists with a relatively blank palette. "You had a lot of freedom, [we] were told a certain level of what it needed to be, but beyond that it could be whatever you wanted," explains Craig Stitt, a former artist at Insomniac and the person behind the original idea for the first *Spyro* game.

For example, Craig designed the look of the Lost Fleet level, a spooky area filled with shipwrecked galleons and acidic green rivers. "It was just visualising what a submerged, haunted-looking shipwreck would be and then trying to figure out how to pull that off poly-count wise," he says. Craig was also one of Insomniac's first employees and described framerate as the "big limiter from *Disruptor* on up". "How can we draw this with the least number of polygons and not have it look like crap? That was a tricky thing to make. *Spyro* is very organic, everything's curvy, so that caused problems," Craig laughs.

DEVELOPER HIGHLIGHTS

RATCHET & CLANK
SYSTEM: PLAYSTATION 2, VARIOUS
YEAR: 2002

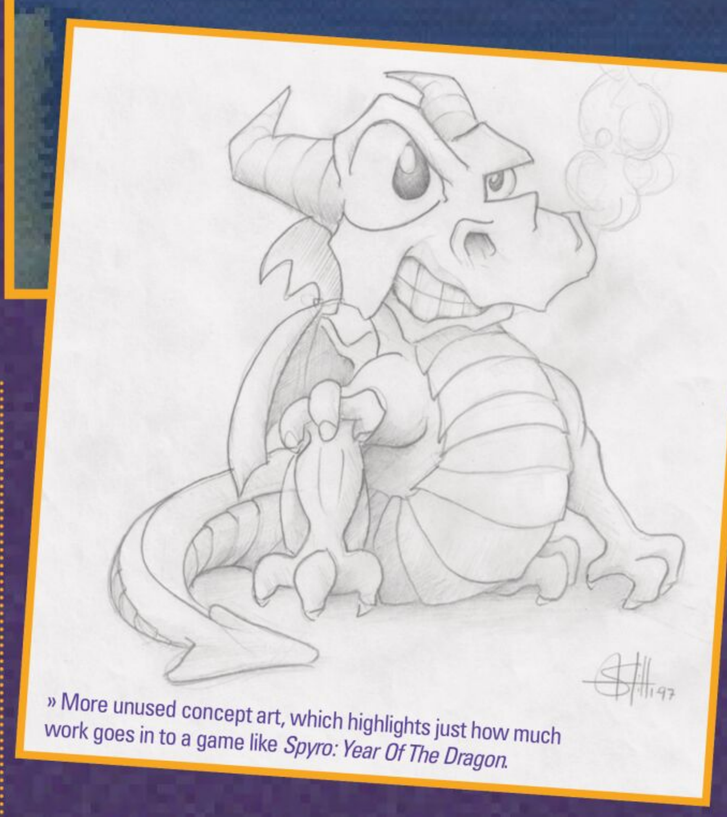
RESISTANCE: FALL OF MAN
SYSTEM: PLAYSTATION 3
YEAR: 2006

SPIDER-MAN (PICTURED)
SYSTEM: PLAYSTATION 4
YEAR: 2018

» [PlayStation] Critters help out in boss battles after being rescued – here, Sheila's stomp shoves poor Buzz into the lava.

CASTLE CARNAGE

Controlling Sheila, you have to work your way through a gauntlet of rhynocs to knock down their giant sand castle and destroy their artillery, letting a pack of seals blow up the rhynocs' base of operations. As they say – all's fair in love and war.



» More unused concept art, which highlights just how much work goes in to a game like *Spyro: Year Of The Dragon*.

» [PlayStation] Enemy designs are bright and cartoonish – they're consistently fun to interact with, laughing at Spyro whenever they hit him.

As a result Craig needed to re-think level art and collision detection for all five new critters. "I remember just thinking that we've got too much going on here – that was a regular feeling," Craig says. However, he described the game's project management as ambitious but realistic. "I definitely wanted to make this immersive world where it felt real. As cartoony as it was, it all worked together," he continues.

Caroline described the team at the time as enthusiastic gamers and ideas would often come from their play sessions. "It is so useful to look at mechanics in other games and see what works and what doesn't work," Ted says. "With a ten and a half month development cycle, you really have to be able to produce quickly and not spend a lot of time spinning your wheels."

For example, Caroline remembers playing a new *Street Fighter* game and wondering whether she could create a simplified version for *Spyro*. "We knew how the engine was built, we knew how collision systems worked on the characters," she says. "Because design was also doing scripting, we knew how to make something work, even to a basic rudimentary state." Caroline originally pitched the minigame as something similar to Rock'Em Sock'Em Robots until someone thought it would be funnier with yetis. Caroline was conscious to make minigames easily controllable, a decision also partially informed by the limited button layout of the PlayStation controller. "You would really have to think about, 'how would I make two yetis box?,'" she says.

Brian collaborated with Gavin Dodd on the main storyline and was interested in expanding the lore of Spyro's world. "I wanted to tell a story with heart," Brian admits, including romantic elements between Spyro's friend Hunter and the bunny Bianca, assistant to the evil reptilian sorceress. Additionally, *Year Of The Dragon* has some particularly bonkers level narratives. For example, journeying through a fairytale land besieged by cat wizards only to see its princess elope with a cat on a flying motorcycle.

> "I REMEMBER THINKING THAT WE'VE GOT TOO MUCH GOING ON HERE – THAT WAS A REGULAR FEELING"
> CRAIG STITT

Everyone Retro Gamer interviewed for this piece looks back at this time period extremely fondly. Interviewees say that working at nights and on weekends was common, but that this was driven by enthusiasm rather than mandated crunch. Michael describes it as a "magically creative time". Matthew Whiting remembers the night that Insomniac was finalising the gold master of the game. Brian suddenly felt that the levels for Agent 9, a space cadet monkey with FPS and third-person shooting mechanics, were missing something. "There was only the one gun and he wanted a different gun in there somehow. He was going to put in a power-up and two of us were in there arguing with him, trying to talk him down off the ledge … but he won, he put it in and it worked," he says.

Creative differences did occasionally rear their heads, but these issues were driven by a passion for quality rather than personal issues. However, Insomniac was now changing. Ted feels that Insomniac's work culture has developed to focus more on sustainability and maintaining a work-life balance. "We were learning to be more disciplined," he admits. "That's ultimately where we grew after *Spyro* because being on a very short production schedule, wanting to do everything under the sun in the game, has trade-offs. We learned what those trade-offs were and in subsequent projects we started becoming much better at controlling scope, planning and thinking ahead."

Additionally, Insomniac's relationship with publisher Universal had become "occasionally contentious". Insomniac had originally signed a three-game deal with Universal, which was extended for *Year Of The Dragon*. However, Universal's primary focus was the film and television industry and Insomniac had started to develop a strong relationship with Sony. "At that point, I think Universal's interests had changed as well – I don't think it made a lot of sense for either side to continue," says Ted. "Thus, it was easy for us to part on friendly terms and start working with Sony." Additionally, Insomniac was simply ready to move on from *Spyro*, according to Ted, although all developers interviewed look back on the third game with pride. "We as developers felt that *Spyro* had kinda run its course … we needed to move beyond that and we [had] aspirations for different things," Ted says.

Spyro Reignited Trilogy, a remaster of Insomniac's *Spyro* games released by *Skylanders* developer Toys for Bob in 2018, did a spectacular job reimagining these games for modern systems. However, there's something special about *Year Of The Dragon* that still shines through. The raw energy poured into the game is palpable and infectious – it left an indelible mark on a legion of PlayStation owners around the world. ✱

G-Con 2

» **PLATFORM:** PLAYSTATION 2 » **RELEASED:** 2001
» **COST:** £19.99 (LAUNCH), £20+ (TODAY, BOXED), £5+ (TODAY, UNBOXED)

There was little doubt that Namco would issue a PlayStation 2 compatible follow-up to its popular PlayStation gun, the G-Con 45 – it was only a matter of getting the software ready. The G-Con 2, or GunCon 2 outside of Europe, accompanied Namco's enhanced home conversion of *Time Crisis II* upon its launch in October 2001. Having done a good job with the original model, Namco didn't need to make many changes and elected to create a gun with a more rounded body, a d-pad on the back and an extra C button on the bottom of the handle. The new gun connected via USB, and the video connector was retained.

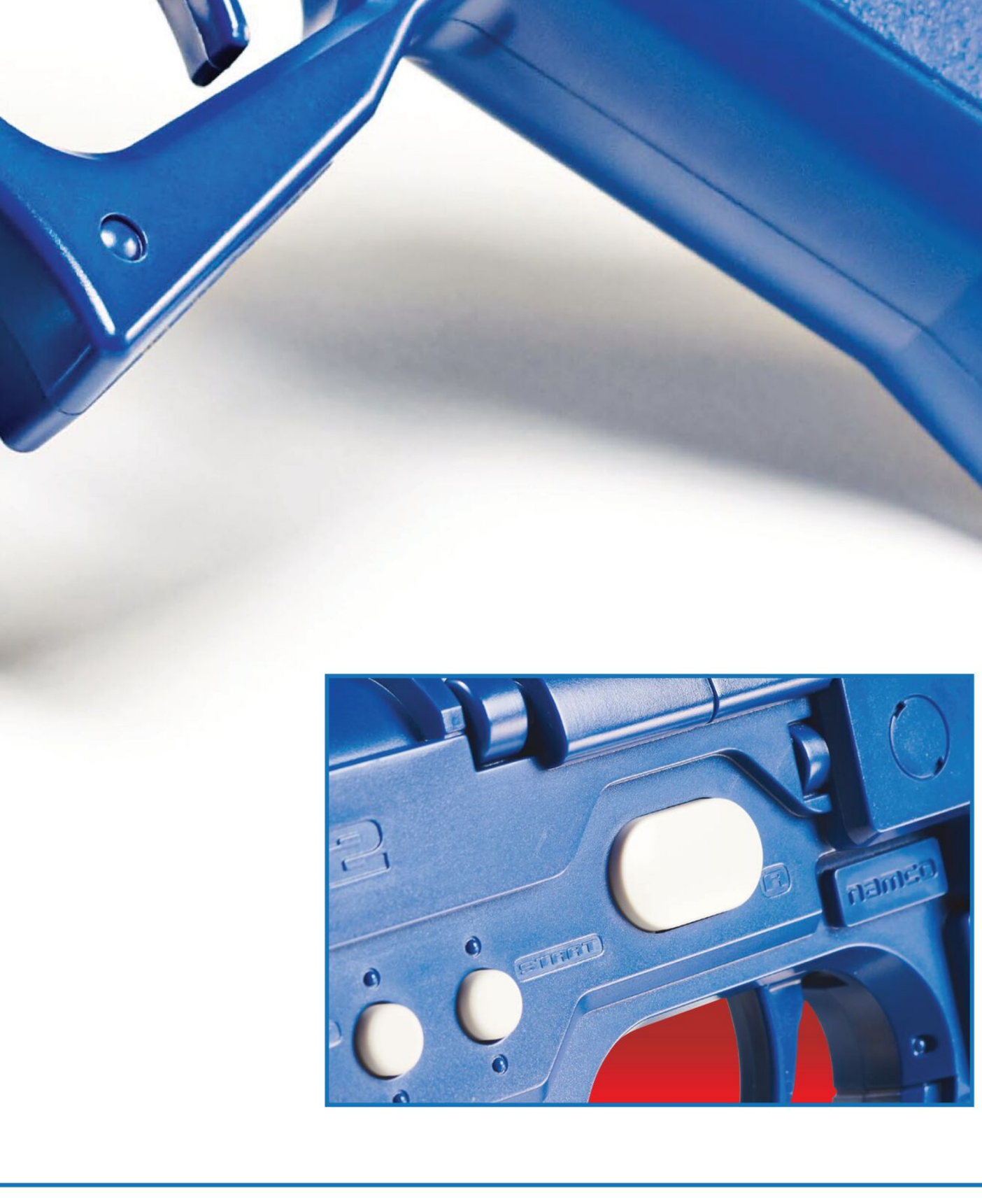
As the G-Con 2 appeared relatively early in the life of the PS2, it didn't have the problem of supplanting an existing lightgun standard, which had caused consumer confusion when the G-Con 45 was introduced. Other developers of lightgun games, including Capcom and Sega, adopted Namco's gun as the platform standard, meaning that there was never any confusion as to whether your gun would work. In fact, many of the early G-Con 2 games were also compatible with the G-Con 45, allowing players to bring their existing PlayStation guns into battle. *

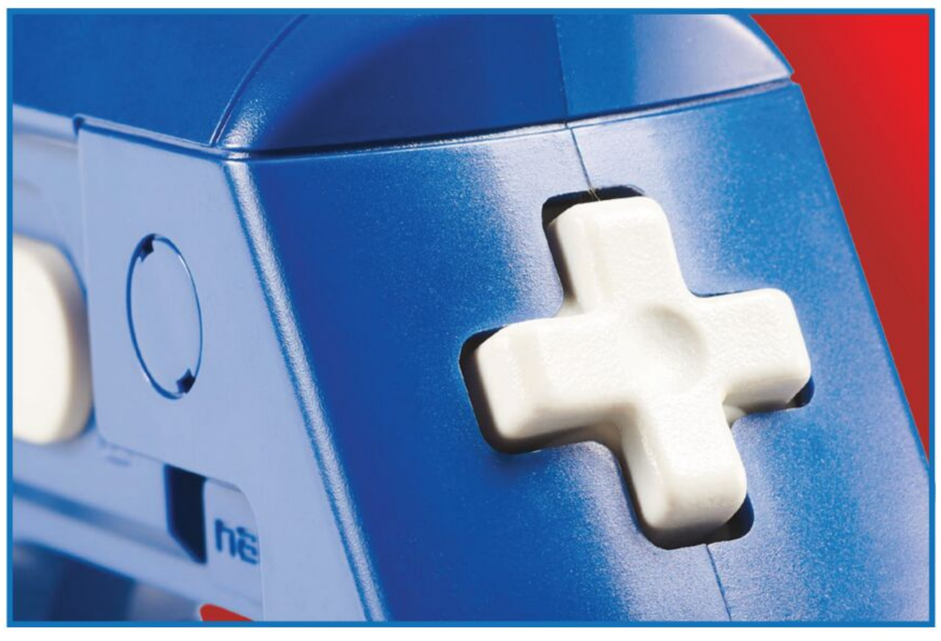
G-Con 2 fact

■ G-Con 2 models are coloured based on their regional release – black models originated in Japan, European models are a dark blue, and American guns are an extremely bright orange.

ESSENTIAL GAME
TIME CRISIS 3

While there are plenty of worthwhile gun games on the PS2, the G-Con range was made for *Time Crisis* and we'd be daft not to pick one of them for this spot. It's a difficult choice because both the main games and spin-off *Crisis Zone* have their own unique charms, but the opening beach assault and the newly introduced weapon selection mechanic of the third game just win out for us. Plus, you can't get away with using an original G-Con 45 like you can with *Time Crisis II* and *Crisis Zone* – the newer gun is a genuine necessity here.





THE MAKING OF
Project ZERO 1-3

TECMO TOOK A DIFFERENT APPROACH WHEN IT TACKLED THE SURVIVAL HORROR GENRE, MAKING A CAMERA AN UNLIKELY WEAPON IN THE PROCESS. WE TALK WITH SERIES CREATOR MAKOTO SHIBATA AND PRODUCER KEISUKE KIKUCHI ABOUT HOW THEY DELIVERED A TRILOGY OF THE SCARIEST HORROR GAMES EVER MADE

Words By ROBERT ZAK

IN THE KNOW

- **PUBLISHER:** TECMO
- **DEVELOPER:** TECMO
- **RELEASED:** 2001, 2003, 2005
- **PLATFORM:** PLAYSTATION 2, XBOX (1 AND 2)
- **GENRE:** SURVIVAL HORROR

DEVELOPER HIGHLIGHTS

TECMO BOWL
SYSTEM: ARCADE, VARIOUS
YEAR: 1987

NINJA GAIDEN BLACK
SYSTEM: XBOX
YEAR: 2005

MONSTER RANCHER (PICTURED)
SYSTEM: IOS
YEAR: 2019

» [PS2] Miku inherits her mother's supernatural senses and camera, but hopes not to share her suicidal fate.

The best horror games tend to show their cards differently to horror films. Where in films things often begin harmoniously, with just some eerie music or a mildly unusual sighting hinting at the impending darkness, videogames like to come out swinging. Think of the chaotic lorry-crash opening of *Resident Evil 2*, the alley nightmare that introduces you to *Silent Hill* or, going back, the monster smashing through the window in *Alone In The Dark*.

In some ways, the 2001 PS2 horror game *Project Zero* ('*Zero*' in Japan, *Fatal Frame* in the US) sticks to the fundamentals of the great games leading up to it. The difference is that nothing *really* happens for a good while in *Project Zero*.

Instead, after a nebulous opening cutscene introducing the sixth-sensed siblings Miku and Mafuyu, you enter the Himuro Mansion and are instantly submerged in a murky lake of reverberating sound – choral wailing and cavernous synths that sound both incorporeal and all-enveloping. Resembling the micropolyphony used in movies like *2001: A Space Odyssey* and the excellent 2015 horror *The Witch*, it's an unyielding alarm from a dark dimension; it tells you that you're now in a tortured place, and there's no turning back.

A thousand tasteful touches like this helped *Project Zero* build on the fine lineage of survival horror games dating back to the original *Resident Evil* in 1996. It inherited certain traits of its predecessors – semi-fixed camera angles, stodgy movement and a scarcity of resources – but also addressed many oversights and shortcomings that had been blighting the genre for years.

The most glaring of these was the fact that, despite all the best horror games around the turn of the millennium being Japanese-developed and driven by Japanese art styles and design philosophy, they leaned heavily on western horror movies: *Resident Evil* and George Romero zombie films, *Clock Tower* and Dario Argento slasher flicks, *Silent Hill 2* and *Jacob's Ladder*. It didn't matter that Japan had its own rich horror legacy – there seemed to be no belief among publishers that a wider audience would be interested.

Project Zero creator Makoto Shibata didn't want to simply recreate western horror through a Japanese lens. The rise of Japanese 'J-horror' in the west, courtesy of breakthrough hits *Ringu* and *Ju-On: The Grudge* – whose American remakes were released evenly between the first three *Project Zero* games – proved that the world was captivated by these distinctly Japanese tales of curses, vengeful spirits and rituals.

But when talking to us about the inspirations for *Project Zero*, Shibata only alludes briefly to the growing popularity of J-horror – that was more a concern for publishers. Instead, he focuses on the traditions of Japanese horror and his own ghostly encounters.

"This game started with the idea of creating a horror game where the scariest thing possible is the enemy. For me, what I feared most were ghosts, much more than monsters," he tells us. "And while we considered various weapons to

True HORROR

TALES OF REAL HAUNTINGS THAT SURROUNDED PROJECT ZERO'S DEVELOPMENT

Hairy SITUATION

During the making of the game, creator Makoto Shibata kept finding long strands of glossy hair in strange places – on his keyboard at work, and around his room – despite having no visitors. Based on the hair's good condition, Shibata concluded that the ghost was probably quite pretty (though he never got to see it).

Ghost CODE

When designing the 'Rope Hallway' in *Project Zero*, there was a pair of legs in the mirror at the end of the environment, as if someone was hanging just out of shot. Developers couldn't get rid of the creepy bug, but eventually it simply vanished of its own accord (ghostly feet would feature prominently in *Project Zero 3*).

Couch CREATURE

One night after a late night at the office, Shibata went into his living room to find the figure of a woman in white lying face-down on his couch. He tried turning the light on but it wouldn't work, so he had to stay in the company of the mystery visitor until the lights switched themselves back on minutes later.

> "This game started with the idea of creating a horror game where the scariest thing possible is the enemy. For me, what I feared most were ghosts, much more than monsters"
> Makoto SHIBATA

» [PS2] Sometimes, the spirits are barely distinguishable from the shadows around them, making you question what you're seeing.

Spooky SEQUELS

WHAT THE SERIES GOT UP TO AFTER ITS PS2 HEYDAY

Zero: TSUKIHAMI NO KAMEN (2008)

■ The Wii's motion controls were a natural fit for a series about facing your fears with a steady hand. *Mask Of The Lunar Eclipse* (as its patched version is known) foregoes heavy atmosphere in favour of jump scares and one too many cutscenes, but the motion controls offered up some memorable moments.

Spirit Camera: THE CURSED MEMOIR (2012)

■ It's just as well that the weakest entry in the series is a spin-off that technically doesn't tarnish the *Project Zero* name. It came with an art-filled booklet that you pointed the 3DS camera at, which was a nice touch, but battling ghosts in augmented reality just didn't work.

Project Zero 2: WII EDITION (2012)

■ This retelling of the Amakura twins' story recaptures some of the atmosphere missing from the first Wii game. Still, the centred third-person perspective just wasn't as artful or interesting as the PS2 series, even if it technically felt slicker and more modern.

▶ use to fight those enemies, we found that a camera was the best fit with the gameplay. You need to look straight at something scary, and then draw it in as close as possible in order to photograph it, so we thought it would really bring out the scariness of the ghosts."

The series' mysterious camera, the Camera Obscura, worked on multiple levels. Firstly, it pulled us into the first-person perspective, which few horror games had done up to that point. Suddenly, you weren't just navigating a person around foreboding environments – you *were* that person, fully immersed in these places that were fully 3D-rendered rather than prerendered like many horrors before it.

» [Xbox] The Xbox update to *Project Zero* adds numerous extras, including new ghosts, new costumes and a new 'Fatal' difficulty mode.

In some ways, this camera-eye view was liberating, letting you freely move around environments to spot items and ghostly sightings that would not be visible in the main 'field' view. But looking and moving in this perspective were agonisingly slow, like a nightmare where you're trudging through mud to escape a monster. First-person exploration felt claustrophobic too, with the ornate frame around the camera lens restricting your field of view. The perspective made puzzles more interesting as you scoured the environment for clues, while pulling you into a prescient style of horror to evoke what Shibata and producer Keisuke Kikuchi call "an incomparable sense of isolation".

Meanwhile, the field view fully exploited the horror potential of increasingly unfashionable semi-fixed cameras. Low-angle shots with Miku in the distance meant spectral beings could glide by in front of the lens to the jarring screech of violins, or something could disappear around a corner at the end of a long corridor. Everything about *Project Zero* was intense, and just 15 minutes spent in this mire of dark soundscape, jump scares and more subtle spooks would leave your nerves shredded; before long, you were mistaking grainy shadows or tattered curtains for ghosts, and questioning whether markings on the wall resembled scratch marks or human outlines.

» [PS2] First-person horror games were a rarity in 2001, so pulling you into the camera viewfinder was uniquely immersive.

The 'based on a true story' suffix to the game's name isn't quite as absurd as it sounds. Shibata's entire life – from childhood to the development of the *Project Zero* series – is shaped by paranormal events. In fact, one of his earliest memories of these is how he came up with the idea for the Camera Obscura.

"When I was young and would wake up in the middle of the night, I frequently heard the whispering of large groups of people coming from the nearby shrine and passing in front of my house. It was a time when I didn't know the term 'ghosts' but even as a child I knew that this was something I must never be involved with. I believed that if I opened the curtains

Project Zero: MAIDEN OF BLACK WATER (2014)

The last game in the series had the potential to make the best use of the Wii U's gimmicks. But while the Wii U controller made for a great Camera Obscura that you pointed at things, the ghost designs were tame and there was a lack of the exploration that made the previous settings so memorable.

» [PS2] The puzzles of *Project Zero* were relatively simple, moving away from the obscure quandaries of previous horror games.

and saw that process, I would be taken away by them.

"One day, I thought up a way to 'see them without looking at them' – by using a broken camera I received from my father," Shibata continues. "If I looked at them through the viewfinder of the camera, I could see them without them knowing. It was a very childlike idea."

Cameras have their own history of dalliances with the paranormal. There was the practice of 'spirit photography' in the 19th century, when cameras could ostensibly capture the spirits of the dead in photos with their living loved ones. This was actually a double exposure trick, but several snake-oil photographers made good money off this practice before being exposed as hoaxsters.

There are also lingering beliefs among the older generations in Japan around the dark nature of photography. One superstition has it that three people shouldn't take a photo side by side, because it will condemn the middle person to an earlier grave than the other two (with the pragmatic knock-on effect that older people would usually be given the central position in photos – making the curse align conveniently with nature's course).

Another old belief indigenous to Japan is that photographs could steal a person's soul – the more accurate the picture, the more soul it absorbs. This is directly represented in *Project Zero* where clearer pictures deal more damage to the ghosts you fight.

> **"I thought up a way to 'see them without looking at them' – by using a broken camera I received from my father"**
> Makoto SHIBATA

» [Xbox] There are plenty of unsettling discoveries to make as you explore Himuro Mansion.

Other ideas for weaponry were thrown around, such as using 'ofuda' talismans to ward off the ghosts, or 'Hamaya' ('demon-breaking') arrows. "At one point, we also rewrote it to employ a game system where you would accumulate fear and use a shout button to shout at a ghost and temporarily drive it back," Shibata said in an interview for the game's website. "It was awful, though." The camera was the clear winner as the weapon of choice – an iconic decision that would become the series trademark, distancing *Project Zero* from the physicality and gore that many of its peers resorted to.

The shortcomings of combat in great series like *Resident Evil* and *Silent Hill* were well-known by 2001. Limited moves, and the fact that many players would choose to zigzag around enemies rather than confront them seemed incongruous with the genre (a point highlighted by *Silent Hill: Shattered Memories* designer Sam Barlow in issue 214).

Project Zero, on the other hand, *forced* confrontation, usually locking you into a room with a ghost that you'd need to track, focus on it to build up the damage you deal, and then let it get as close as possible with the aim of snapping it in a high-damage 'Fatal Frame' shot.

These fights were intense, but also offered a break from the accruing dread caused by the game's suffocating atmosphere. By popping up scores that showed the damage you dealt, the developers injected a touch of the

lightgun arcade experience into *Project Zero* – a welcome bit of 'gaminess' in an otherwise relentless horror experience.

The series heavily revolves around femininity, and the oft-tragic role of women in Japanese folklore and horror myths. "In traditional and classic Japanese ghost stories, it was often said that those who were oppressed and held strong grudges would reappear as powerful ghosts," reveal Shibata and Kikuchi. "In those ancient times, it was often women who were the most oppressed members of society and would reappear as ghosts."

The types of ghosts you encounter across the whole series echo those of Japanese folklore. There are the Onryou – vengeful spirits lashing out in eternity at the living over the cruel nature of their demise. Those harmless but no less terrifying ones that stalk the corridors and appear when your camera starts glowing? Those are Fuyuurei, or floating spirits – echoes of the dead.

There are also a fair few Zashiki-warashi wandering around the Himuro Mansion – child-ghosts that sing eerie lullabies on the soundtrack, run away from you, and occasionally rise out of floors or old wells to attack you. You know a game takes its spooks seriously when even an infant can be deadly.

> **"In traditional and classic Japanese ghost stories, it was often said that those who were oppressed and held strong grudges would reappear as powerful ghosts"**
> Makoto SHIBATA

Being made in the early Noughties, it would be easy to reduce the series' penchant for young female protagonists to a means of heightening the player's sense of vulnerability, but the reality was a little more subtle. In keeping with the myths, the series features female Onryou as its main antagonists. In the first game, this spirit is Kirie, a young woman who was sacrificed in a ritual intended to keep the gates of hell shut. The ritual failed, causing demons to spill out and kill everyone in the mansion, trapping them there as murderous ghosts. The lack of physical combat and desired parallels between the antagonist and protagonist made it a no-brainer that *Project Zero*'s hero should be a woman.

"The protagonist's circumstances and feelings have similarities to the final boss. The game's story is one where you must understand the final boss, and although you strongly sympathise with the boss, you must defeat her," Shibata and Kikuchi tell us. "So for that reason, we made the protagonist a female who has a strong ability to sense the supernatural and can sympathise with spirits as well."

Project Zero was a success both in Japan and in the west, riding the tide of Japanese horror arriving on western TV screens via the easily distributable medium of DVD. Tecmo wasted no time in commissioning a sequel.

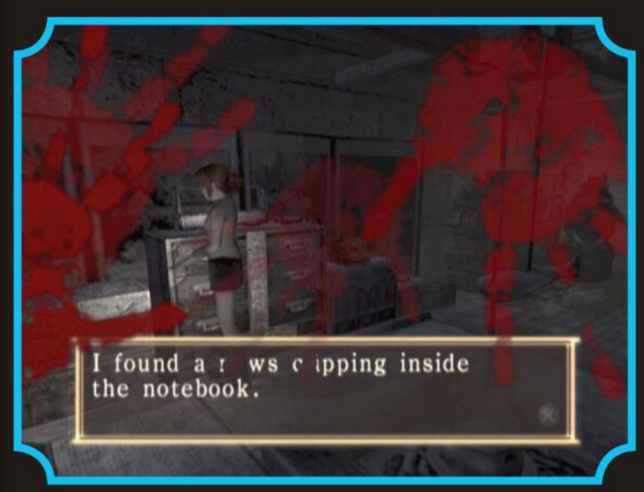
According to Shibata and Kikuchi, many people didn't complete the original because it was too scary. Instead of treating this as a hint to dial down the horror, they instead offered a greater incentive for players to push through their fears. "We shifted our attention to making the storyline more interesting, to encourage such players to overcome the scariness in wanting to see the end of the story."

Project Zero 2: Crimson Butterfly was no less menacing than its predecessor, expanding the setting out from a single building to an entire abandoned village – where each house and shrine had its own tragic self-contained stories to tell.

This time you controlled Mio Amakura, who follows her twin sister Mayu deep into the haunted Lost Village, slowly unearthing a brutal story of another ancient ritual – this time involving twin girls. You were no longer just trying to prevent grim history from repeating itself; you and your sister were integral to the malevolent ghosts' plans – the stakes were *much* higher.

The sequel looked better visually, benefitting not only from the developers having a better grasp of the PS2's technical capabilities, but also from their desire to imbue the game with more beauty, according to the CG director Daisuke Inari, who said in an official blog post: "Since it's a horror game, by its very nature it of course has to be scary. But just being scary doesn't mean just anything will do – ideally, you would be able to feel a subtle Japanese beauty amidst the fear."

To that end, *Project Zero 2* had a more fantastical feel: a dark twist on Lewis Carroll's *Alice In Wonderland* where, in place of a rabbit, you followed a trail of



» [PS2] Each *Project Zero* game would spook up your pause screen if you left it for too long.

» [PS2] Some of the spectral images captured by your camera – like this child being pulled into a well – were the stuff of nightmares.

Silver Screen SCARES

HOW THE FATAL FRAME SERIES WENT BEYOND VIDEOGAMES AND INTO THE WORLD OF CINEMA

The premise of *Fatal Frame* was always going to lend itself well to a movie adaptation, which duly arrived in 2014. *Gekijōban Zero* was based on a novelisation of *Project Zero*, which bizarrely revolved around a suicide pact at a Catholic all-girls school in Japan. It was an eerie and poignant tale, but frustratingly didn't actually depict a single ghost being killed by a camera.

A US movie based on the first *Project Zero* game was announced by Dreamworks in 2002 and was ostensibly going to involve Steven Spielberg on some level. Sadly, it never came to fruition, but early in 2020, *Silent Hill* movie director Christophe Gans announced that he would be working on a new *Project Zero* movie. Details are extremely scarce at the moment, but we do know that it will take place in Japan, which is a promising start!

» [PS2] *Project Zero 2* tells the sombre tale of two twins sacrificed in a ritual, with one of their spirits sticking around to pick a bone with you.

» [PS2] Mio and Mayu in *Project Zero 2* are the series' youngest heroes, facing the threat of being sacrificed for a ritual. No pressure then...

» [PS2] *Project Zero 2* employs various visual tricks with filters and dithering to make the Lost Village an oppressively atmospheric place.

ethereal crimson butterflies that broke up the darkness, all the while luring you deeper into it. Many of the houses and other spaces would be mysteriously well-lit, contrasting with a damp atmosphere in outside areas that evolved on that of the first game. "We put fog across the whole screen to give it a subtle sense of depth," wrote Inari. "Then we worked to make it so that you would get this gradual feeling of unpleasantness, augmenting the strength of the dither and contrast pixel by pixel. The effect also changes depending on whether you're looking through the viewfinder or not."

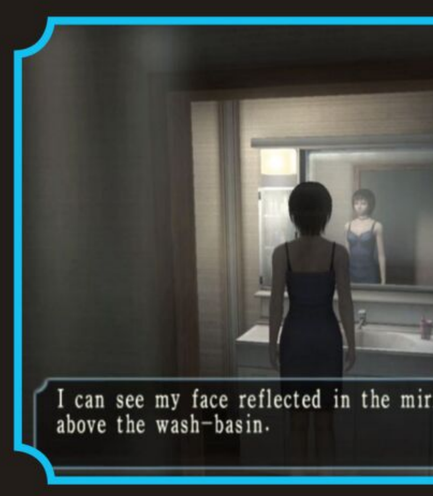
The presence of your sister, meanwhile, and the non-hostile spirit of a man who helped you navigate the village, provided some human comforts in a vast space that could otherwise have felt too daunting.

But even these elements ramped up the horror in their own way. "The scariest part is the moment when you lose sight of the person you wanted to protect, a person who was like your other half and someone you would give your life in order to save," Shibata and Kikuchi explain. "If there are two characters to begin with, the moment you are alone you become worried. When that important person eventually starts to talk about things you don't know, and when you realise you are re-enacting rituals that the twins had done in the past, it's a frightening moment."

Despite the sense of duty the player would feel towards Mayu, she wasn't designed to die easily, because Shibata and Kikuchi knew that this could build up ill will towards her (note that this was *before* the infamously fragile Ashley Graham stunk out a good portion of *Resident Evil 4* by keeling over dead each time an enemy brushed her shoulder). "We did have concerns that it would become difficult, but also that there would be an allure to having scary scenes where Mayu is attacked and you could save her by capturing the attacking ghosts through the camera," Shibata and Kikuchi explain. "But if Mayu is caught by spirits and dies all the time, players would have negative feelings towards her, so we adjusted the game so that she doesn't die easily."

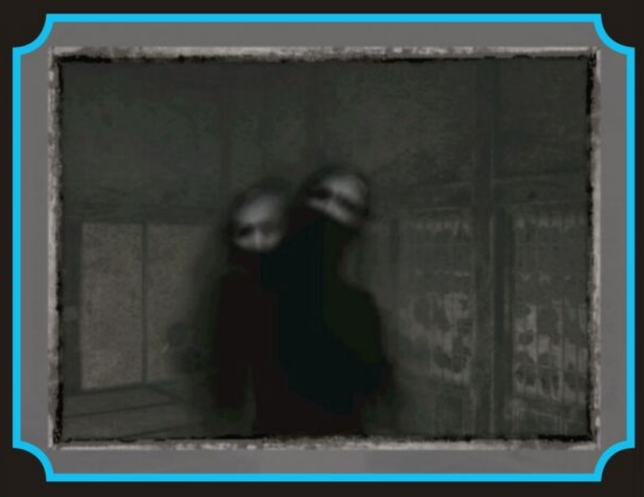
The Camera Obscura's powers were bolstered. You could now execute combo shots that let you follow up perfectly timed Shutter Chances with second and third shots. Along with the fact that you would often be fighting more than one enemy at once, it gave the combat more of an action flavour.

All the little improvements in *Project Zero 2* clicked. It became the best-rated and best-selling title in the series, going on to shift 160,000 copies. As with the original game, Tecmo also created an expanded Xbox release, which featured numerous extras, including a brand-new first-person mode and the addition of Dolby Digital amongst other enhancements. Shibata and Kikuchi's sequel firmly established the series as a survival horror heavyweight among fans and critics, even though it came at a time when the genre was waning commercially.



» [PS2] The mirror in Rei's bathroom provides a constant threat even though nothing ever happens… or does it?

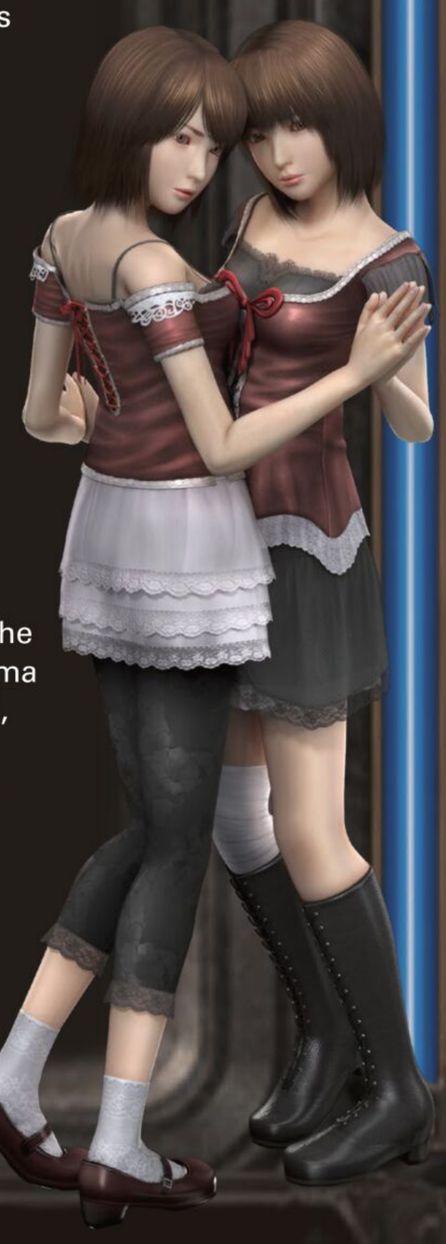
» [PS2] As you play through *Project Zero 3*, the real world gets creepier, making the spooky dream world something of a much-needed getaway.



» [PS2] *Project Zero 3* has some of the moodiest ghost designs, such as these shadowy beings.

Where *Project Zero 2* swept the player off into the realm of magical horror, its follow-up (which didn't receive an Xbox port) brought everything ruthlessly back to reality. Japanese horror cinema showed that curses and spirits could just as easily exist in a mundane domestic setting as a cobwebs-and-grandfather-clocks 'haunted' one. It was time for the series to quite literally bring horror home.

Enhancing its harsh sense of verisimilitude, *Project Zero 3* also blurred supernatural elements with the very real psychological pains of trauma and grief. Its three protagonists – Rei, Miku (returning from the first game) and Kei (the series' first male protagonist) were all battling with their own personal tragedies. The game oscillates deliriously between the Manor Of Sleep dream world and Rei's home – which slowly starts being encroached upon ▶



by the dream realm. Kikuchi summed it up perfectly in the build-up to the game's launch: "The story of the previous game implemented a kind of fantastical scariness, but *Fatal Frame 3* allows you to experience a more raw, moist kind of fear."

The Manor Of Sleep, while visited through dreams, was less a dream and more a purgatory dimension, where the living would be haunted by dead loved ones they couldn't let go of. "If it was a dream that only Rei herself sees, then that would just be an odd dream," Shibata and Kikuchi tell us. "But if several people had dreams set in the same house, then we thought that it would feel like the Manor Of Sleep actually exists. That's why we have three people visiting the Manor Of Sleep from different viewpoints."

» [PS2] The camera view in *Project Zero 3* was elegant and refined, offering an instant way to toggle between different film strengths.

Switching between three characters in two separate dimensions makes for a sometimes confusing experience, not unlike a dream where the identities of people and places are constantly shifting. In fact, large parts of the Manor Of Sleep revisit locations from Himuro Mansion and the Lost Village – manifesting Miku and Kei's grief – while the rest of it is layered with the sad memories of past visitors.

Each character has their own abilities that let you experience the Manor in different ways. Rei's Flash ability drives ghosts back, while Miku uses her Sacred Stone to slow down time. In an interesting reiteration of the idea that physicality counts for nothing in this series, male protagonist Kei has the weakest camera, and relies heavily on a dedicated 'Hide' button to help him elude passing ghosts.

But for all the Manor's surreal layering and symbolism of each character's trauma, Shibata and Kikuchi believe there's a strange 'comfortable darkness' about the Manor Of Sleep. "There is a classic horror film directed by Robert Wise called *The Haunting*. In it, after the female lead goes through various experiences in a haunted house, it goes from being a scary space to a comfortable, dreamlike space where she feels at ease," they tell us. The darkness, after all, offers you some solace by letting you hide in it, and the setting would have been at least somewhat familiar to series fans (who, based on the returning characters, locations and myriad callbacks to earlier games, were very much the target audience).

» [PS2] The original game's hero, Miku, goes back to the Himuro Mansion in *Project Zero 3* – still creepy, but oddly familiar.

The real horror resides in Rei's house – a sad domestic space where your only comforts are a cat and the cosy sanctuary of Miku's room. You don't directly fight or confront the ghosts in your house, making their presence far more subtle and creepy – slender feet poking out from behind a wardrobe, something gliding past a kitchen curtain that may or may not have been the curtain itself, or that *awful* bathroom mirror that threatens to spook you throughout the entire game.

To a Japanese audience, the horror of Rei's home would have been in how it encroached on the safe and familiar setting of an urban home. But to a western audience, the sliding paper doors, the shrine to a dead relative, and the grey tones of the home would have felt decidedly foreign, identifiable mostly from what we'd seen in J-horror films.

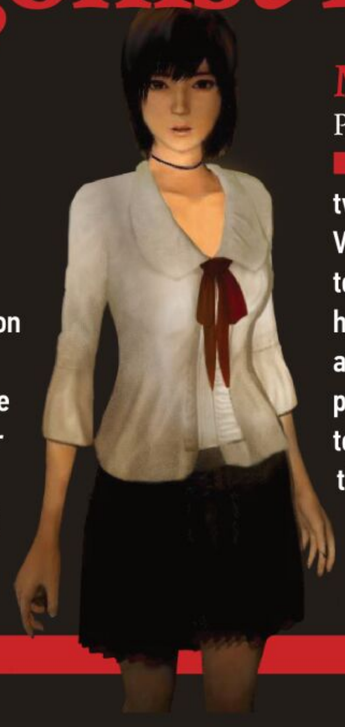
Protagonist PROJECTIONS

MEET THE KEY CHARACTERS OF SHIBATA'S TRILOGY

Miku HINASAKI

Project ZERO

The first hero of the series was just 17 years old when she set foot in the Himuro Mansion. Gifted with a hereditary sixth sense, Miku came into possession of the Camera Obscura – the ghost-snapping device that drove her mother to suicide. Miku later reappears in *Project Zero 3*, helping Rei solve the mystery of the Manor Of Sleep.



Mio AMAKURA

Project ZERO 2

Following her flighty twin Mayu to the Lost Village, Mio must fight to save both her and her sister's souls from an ancient ritual. Mio proves more resistant to the call of the village than her sibling, but will still follow her to whatever end.

Rei KUROSAWA

Project Zero 3

The lead protagonist of *Fatal Frame 3* is haunted by the sudden death of her fiancé. Overcome by grief, she begins to visit a dark place in her dreams where she must confront her demons lest they spill over into reality and 'spirit her away', leaving behind nothing but a soot stain (a possible nod to the lesser known J-horror *Pulse*).

Suffice to say that later in the game when the TV turns itself on and its static begins to crackle, many of us half-expected a long-haired girl with hair covering her face to clamber out of it.

This was the most uneven but ambitious game in the series. It understood the horror potential of the domestic setting, exploiting it better than possibly any game before or since, including its peer *Silent Hill 4*, which came out the year before in 2004. Like *Silent Hill*, the popularity of *Project Zero* was stifled by changing commercial tastes in horror, which shunned psychological horror for more action-oriented fare. The series struggled to move with the times with its later outings, and always seemed more comfortable within the limitations of earlier console generations.

But maybe the series didn't really need to adapt to industry trends, because the things that still make *Project Zero* harrowing today are also traits that make it a game of its time – the artfully placed camera angles, the painfully slow first-person movement, the careful exploration of beautifully crafted environments that only subtly directed you towards the critical path.

Like the ghosts of its cursed settings, the *Project Zero* trilogy is bound to a certain time and place in gaming history, alluring horror fans with a power to frighten that remains as forceful as ever. ✱

Kei AMAKURA

Project Zero 3

The only male playable character in the series is the uncle of the previous game's hero, Mio. He's also the only character in the game with an explicit ability to hide from enemies, which may not *sound* like much of a superpower but is surely something his fellow protagonists wish they could do instead of having to face their fears all the damn time.

» [PS2] Miku's cat offers some basic creature comforts in between *Project Zero 3*'s ghoulish dream sequences.

RetroMania Wrestling

When Mike Hermann began working on a fan sequel to the arcade classic, WWF WrestleFest, he could scarcely have imagined that ten years later his 'hobby project' would grow into an official sequel, with some of the world's most celebrated wrestlers attached to it

Words by Hareth Al Bustani

IN THE KNOW

- **» PUBLISHER:** RETROSOFT STUDIOS
- **» DEVELOPER:** RETROSOFT STUDIOS
- **» RELEASE:** 2020
- **» PLATFORM:** SWITCH, PS4, XBOX ONE, PC
- **» GENRE:** BEAT-'EM-UP

» Mike Hermann (left) poses with nerdcore rapper Mega Ran, who has a track featured in the game.

When *WWF WrestleFest* first graced arcades three decades ago, all across the world gamers and pro wrestling fans lined up with pockets full of coins, desperate for a turn. None, perhaps, were as taken as a young Mike Hermann. "I had always dreamed of adding additional wrestlers to *WrestleFest* and was surprised that there were no hacks out there," he reflects. Even as he embarked on a career as a business software developer, the game never escaped his mind.

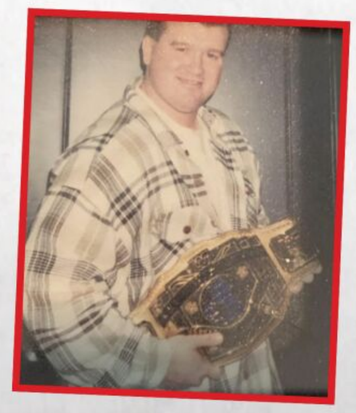
Ten years ago, he attempted to break into the game's code, only to discover it was "not so easily hacked". After spending seven long years developing his own clone of the *WrestleFest* engine, Hermann finally decided to "do things right" and hired a lead programmer. "The first thing he did was start over," he laughs. Hermann and his growing Retrosoft Studios team rebuilt the engine from the ground up, transforming it from a clone into "something much more" – an official sequel.

While *WrestleFest*'s core mechanics, such as the grappling system, remained, they had to be recreated from scratch. Backed by a tight team of talent, the project quickly took on a life of its own, coming together in just three years. The resultant game, *RetroMania*, is fast-paced, dynamic and varied; pairing button-mashing fun with enough depth to satisfy even the most entrenched fans of professional wrestling.

Offering a glimpse into his encyclopaedic knowledge of classic wrestling games, Hermann explains, "Grappling is triggered automatically when two wrestlers get close enough to each other. I believe this mechanic was first seen in *Big Pro Wrestling* by Technos of Japan. We opted to go that route as well because that is what *WrestleFest* used. Once in a grapple, it is timing based but we also added a level of randomness to it so the game is not strictly timing based."

Throughout the entire production process, Hermann's mantra of "F-U-N, Fun!" underpinned every decision that was made. "Does this make the game more fun? It needs to be easy to pick up and play, and needs to be fun. As weird as this sounds, I think that is lost sometimes." Asides from the grappling, players can also perform a

» Mike Archer has had an incredible videogame wrestling career. You can read more about him in issue 214.

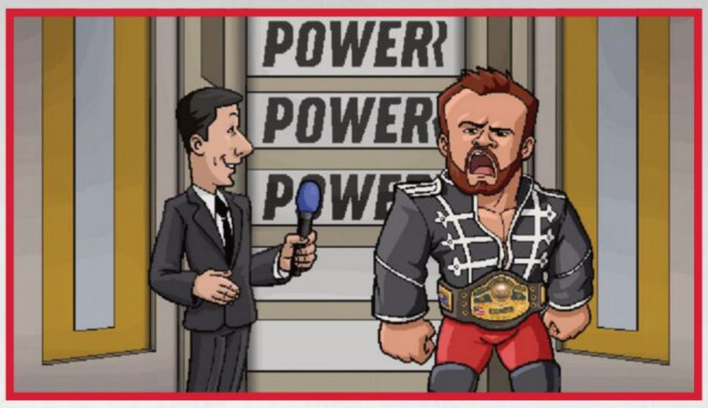


variety of standard strikes, including punches, kicks and, of course, dropkicks.

Raising the stakes, they can even climb the top rope, fight on the front apron and leap from the top of a steel cage. And if they really have a grudge to settle, there's nothing a steel chair can't fix. "Reversals happen automatically when you attempt to do a powerful move too early in the match. But there are some random reversals and even ways you can better your chances of reversing a move," Hermann adds. "We definitely wanted a fair share of button mashing, because let's face it, button mashing can be a lot of fun."

For players hoping to simply dive headfirst into the action, there are a variety of match types on offer. While old school purists will most likely gravitate towards traditional singles and tag matches, those seeking a little more chaos may prefer to grapple with the game's eight-man tag, elimination, tornado, steel cage and Retro Rumble matches.

The title also features a story mode, starring Johnny Retro – better known as WWE's John Morrison – and a classic ladder competition, called Ten Pounds of Gold, where players compete for the National Wrestling Alliance's (NWA) iconic Heavyweight Championship. Among the world's most storied and prestigious wrestling promotions, in 2017 the NWA embarked on a reboot, with a new television show, and a new champion – Nick Aldis. The inclusion of the title and Aldis himself allows *RetroMania* to hang its hat on two pegs – simultaneously tying it into the NWA's classic wrestling lineage, and its status as a modern independent promotion.



» [PC] The Ten Pounds of Gold mode tasks players with rising through the ranks to challenge Nick Aldis for the NWA Heavyweight Championship.

Mike Archer, the game's licensing and business development head, says when Hermann first brought him in as a consultant, they briefly considered producing a "strictly NWA legends" game. "The first thing we did was we signed with the NWA, because if you're a wrestling fan, that Ten Pounds of Gold belt means everything," Archer explains. He continues, "Then we started saying, 'Yes, that is going to bring in the retro guys, but it's not going to capture any of the market that's currently playing games.'"

From the outset, the game's vision was always going to be determined by which wrestlers they could successfully license to appear in the game. Fortunately, having spent seven years handling wrestling licences at Acclaim, and 15 years managing licensing and development for WWE, Archer was uniquely qualified for the job. "Some of the talent we reached out to, we didn't land," Archer admits. "But heck, I think we got enough talent to satisfy four or five different demographics of wrestling fan: the hardcore guy, the retro guy, the current guy, the WWE guy, the AEW guy. And as the talent roster started to take shape, the gameplay began to morph."

> "I THINK WE GOT ENOUGH TALENT TO SATISFY FOUR OR FIVE DIFFERENT DEMOGRAPHICS OF WRESTLING FAN: THE HARDCORE GUY, THE RETRO GUY, THE CURRENT GUY, THE WWE GUY, THE AEW GUY"
> **MIKE ARCHER**

He highlights the inclusion of Zack Sabre Jr, a British wrestler famous for his remarkable technical prowess in the ring. While Zack is not the most physically imposing wrestler, he possesses an uncanny ability to tie up his opponents suddenly and unexpectedly in elaborate submission holds. Archer explains, "If you've checked him out, if you've seen any of his matches in New Japan Pro-Wrestling [NJPW], if you've seen his social media, he's just outstanding, and an outstanding guy to work with. There are people who would buy the game to be him – and that's kind of how we did our metrics."

Archer continues, "We had maybe four or five lists of guys, and then it kind of took on a life of its own, and in the end we were really happy. It's an eclectic bunch, and it's a great bunch of talent." While more talent is expected to be worked into upcoming DLC, the game already features 16 wrestlers, ranging from old school superstars such as Austin Idol and the Road Warriors, to ECW legends Tommy Dreamer and Stevie Richards (and the rest of the Blue World Order) – and indie favourites like Jeff Cobb and Colt Cabana, to

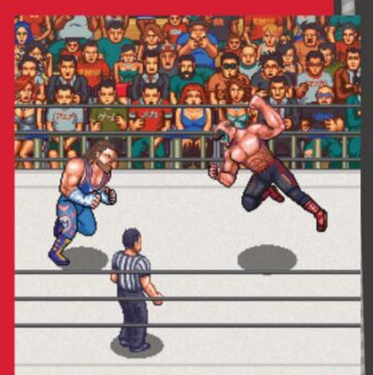
» [PC] Fans of old school wrestling will love brawling across the sweaty, rowdy high school arena.

» [PC] Eager to cater to every demographic, the game features Tommy Dreamers' House of Hardcore promotion.

THE MAIN EVENT

TORNADOS, AND CAGES AND RUMBLES, OH MY!

ELIMINATION



■ Three or more wrestlers duke it out until only one wrestler or team is left standing. Players looking to push their abilities to the limit can try their hands at 3-way, 4-way, tag team, 6-man tag or even 8-man tag matches.

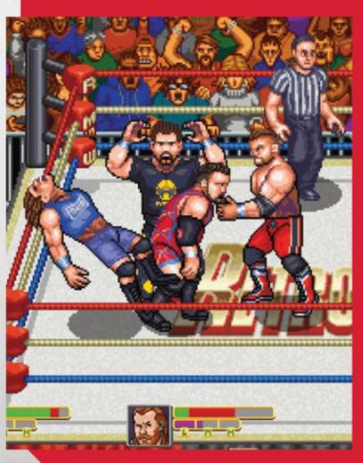
STEEL CAGE

■ During a steel cage match, wrestlers are forced to battle it out within a Big Blue Cage, or a chain link fence. Once again, the options are varied – players can even use the cage itself as a weapon, or hurl themselves from the top, for a truly devastating attack.

TORNADO

■ In regular tag team matches, only one team member can remain active in the ring at a given time. Only these 'legal' wrestlers can pin or submit one another. In a tornado match, all bets are off: all wrestlers are live for the whole match.

RETRO RUMBLE



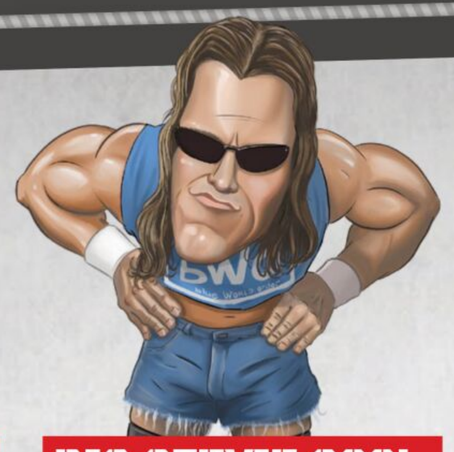
■ Retro Rumble is *RetroMania*'s take on the classic Royal Rumble match, where a new wrestler enters the ring every 20 seconds. As the ring fills up, competitors desperately try to eliminate one another, until only one remains. The ultimate test of endurance.

FANCY A RUMBLE?

AUSTIN IDOL

1ST VIDEOGAME APPEARANCE: RetroMania Wrestling (2020)
SPECIALTY: Power

■ Beginning as a super heavyweight powerlifter in the early Seventies, Austin Idol survived a plane crash, to become a star in numerous wrestling territories. He was famous for his long blonde hair, which he once wagered in a 'hair match' against his rival Jerry 'the King' Lawler.



BIG STEVIE COOL

1ST VIDEOGAME APPEARANCE: WWF No Mercy (2000)
SPECIALTY: Allrounder

■ A member of ECW's Raven's Nest and Blue World Order stables, fitness fanatic Stevie Richards went on to wrestle in WCW, WWE, TNA, Ring Of Honor, and various other promotions – accumulating several titles along the way.

BLUE MEANIE

1ST VIDEOGAME APPEARANCE: WWF WrestleMania 2000 (1999)
SPECIALTY: Shenanigans

■ Named after the antagonists from the animated Beatles film, *Yellow Submarine*, Blue Meanie brought a dose of comedy to ECW's roster – before going on to appear briefly in WWE.

BRIAN MYERS

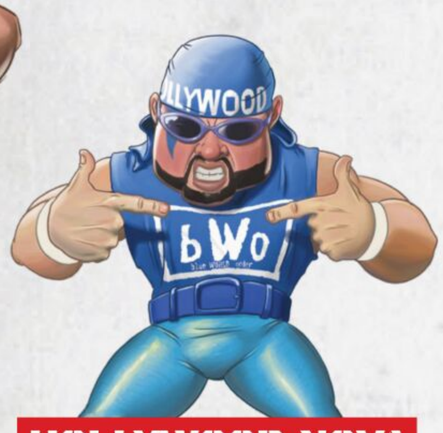
1ST VIDEOGAME APPEARANCE: WWE Smackdown Vs RAW 2009 (2008)
SPECIALTY: Allrounder

■ Myers first made his name at WWE, where he wrestled as Curt Hawkins – winning the Raw Tag Team Championship at WrestleMania with his tag partner, Matt Cardona. Today, he wrestles for Impact Wrestling.

COLT CABANA

1ST VIDEOGAME APPEARANCE: RetroMania Wrestling (2020)
SPECIALTY: Allrounder

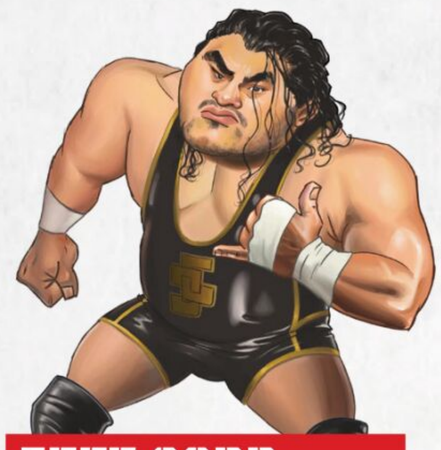
■ An industry veteran and podcasting giant renowned for his consistency and distinct brand of comedy wrestling, Colt Cabana has most recently wrestled for All Elite Wrestling and New Japan Pro-Wrestling.



HOLLYWOOD NOVA

1ST VIDEOGAME APPEARANCE: ECW Hardcore Revolution (2000)
SPECIALTY: Submissions

■ After a brief stint in the WWE, Michael Bucci went on to wrestle in ECW as the comic book inspired Nova, before eventually returning to WWE as the fitness guru, Simon Dean.



JEFF COBB

1ST VIDEOGAME APPEARANCE: RetroMania Wrestling (2020)
SPECIALTY: Power and Agility

■ Jeff Cobb transitioned into pro wrestling after representing Guam as an amateur wrestler at the Olympics. Boasting superhuman size and agility, having wrestled across the planet, he recently signed with New Japan Pro-Wrestling.

JOHNNY RETRO

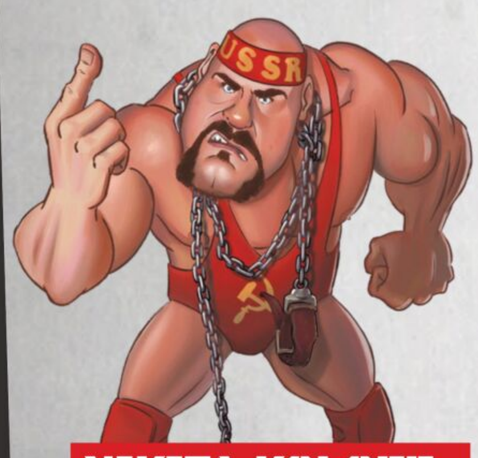
1ST VIDEOGAME APPEARANCE: WWE Smackdown Vs RAW 2007 (2006)
SPECIALTY: High Flyer

■ One of the most dynamic performers of the modern era, wherever John Morrison has wrestled, he has wowed fans with his high-flying antics, and infectious charisma.

MATT CARDONA

1ST VIDEOGAME APPEARANCE: WWE Smackdown Vs RAW 2009 (2008)
SPECIALTY: Allrounder

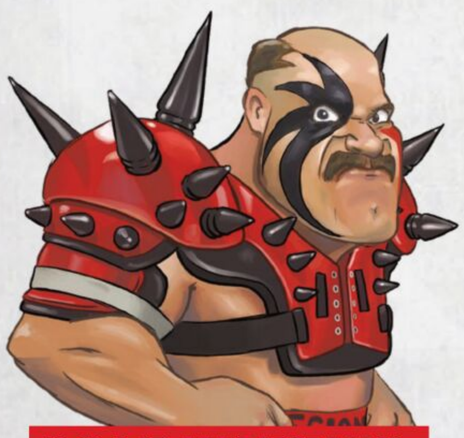
■ Cardona shot to fame as Zack Ryder at WWE, where he built a cult social media following. Having launched The Major Wrestling Figure Podcast with long-time tag partner, Brian Myers, Cardona has since appeared on All Elite Wrestling (AEW).



NIKITA KOLOFF

1ST VIDEOGAME APPEARANCE: Showdown – Legends of Wrestling (2004)
SPECIALTY: Powerhouse

■ One of the Eighties most iconic 'foreign heels', Nikolai Koloff skyrocketed through the Jim Crockett Promotions ranks. Born Nelson Simpson, he learned Russian and never broke character, no matter who was around.



ROAD WARRIOR HAWK

1ST VIDEOGAME APPEARANCE: WCW Wrestling (1990)
SPECIALTY: Powerhouse

■ One half of the legendary Road Warriors tag team, Hawk boasted a rare combination of brute force and agility. He passed away in 2003, at the age of 46.

ROAD WARRIOR ANIMAL

1ST VIDEOGAME APPEARANCE: WCW Wrestling (1990)
SPECIALTY: Powerhouse

■ Joe Laurinaitis, who just passed away in September 2020, was a no-nonsense powerhouse, famous for never staying down. Inspired by *Mad Max*, he and Hawk were one of the most dominant tag teams of their generation.

TOMMY DREAMER

1ST VIDEOGAME APPEARANCE: ECW Hardcore Revolution (2000)
SPECIALTY: Brawler

■ A legend in and out of the ring, Tommy Dreamer won fans over at ECW, doggedly brawling his way through bloody hardcore matches. Having since wrestled in WWE, TNA and the independent circuit, Tommy founded the promotion House of Hardcore in 2012.

WARHORSE

1ST VIDEOGAME APPEARANCE: RetroMania Wrestling (2020)
SPECIALTY: Allrounder

One of the most exciting talents to emerge from the independent circuit, Warhorse recently challenged AEW's Cody for the TNT Championship.

CHRIS BEY

1ST VIDEOGAME APPEARANCE: RetroMania Wrestling (2020)
SPECIALTY: High Flyer

Having already performed in WWE, the up-and-coming Chris Bey has since wrestled as Impact Wrestling's X Division Champion, and as a participant in New Japan Pro-Wrestling's prestigious Super J-Cup tournament.

NICK ALDIS

1ST VIDEOGAME APPEARANCE: RetroMania Wrestling (2020)
SPECIALTY: Powerhouse

Having wrestled across the world, British wrestler Nick Aldis is credited with helping to revive the NWA as its Heavyweight Champion. Charismatic on the mic and imposing in the ring, he oozes old school swag.

ZACK SABRE JR

1ST VIDEOGAME APPEARANCE: Fire Pro Wrestling World (2018)
SPECIALTY: Technician

One of the world's most creative wrestlers, Zack Sabre Jr boasts an unrivalled ability to tie up his opponents in elaborate submission holds. Still in his early 30s, he remains one of New Japan Pro-Wrestling's most iconic superstars.

» [PC] One of *RetroMania*'s earliest moves was to make sure it featured the prestigious National Wrestling Alliance.

» [PC] When wrestler Stevie Richards joined the game, adding his gym as a playable arena was a no-brainer.

mainstream megastars such as Johnny Retro and Matt Cardona. "It started very small. We started off with a pebble and it turned into a rolling boulder," Archer beams. He continues, "If you look at some of the guys, guys like Jeff Cobb are as new as it gets." Having that array of talent, he adds, allows for some exciting 'dream matches'. "Every sport has that: Lebron or Michael Jordan, the age-old question, Andre or Big Show, things like that. We'd like to open that up further as we go farther down."

Off the top of his head, Archer speculates, "We'd love to add some female talent, and bring in a bunch of new characters from NJPW, or even All Japan Pro Wrestling. We've just kind of scratched the surface, and we're taking the cautious 'wait and see' approach. But as we move forward, we're starting to plan."

The game's universe is punctuated by a variety of stunning backdrops and stages. Old school aficionados are sure to love brawling across riotous high school gymnasiums, and prestigious NWA arenas alike. Meanwhile, fans of Japanese 'Strong Style' wrestling, will love tying their opponents up in knots as Zack Sabre Jr, while the crowd chants along, reacting to the in-ring action. Asides from the game's signature *Retromania Wrestling* arena, it also features rings inspired by some of its leading stars, ranging from nuanced to outrageous – with wrestlers walking down the ramp, accompanied by music. While Tommy Dreamer's House of Hardcore arena offers the opportunity to challenge for the HOH Television Title, Warhorse's Hell is a fiery nightmare occupied by a skeleton band, mosh pit, flame barriers and a crowd of the dead.

At Stevie Richards' Fitness, while the boys hit the gym, a ring in the middle acts as a perfect backdrop for a real-life grudge match. "Stevie Richards is one of the best guys you'll ever meet, and he's always been into fitness," explains Archer. "I was always a big fan of Austin Idol from Georgia Championship Wrestling and he just started his own wrestling school, Austin Idol's Universal Wrestling College, so we're putting that in the game." Elsewhere, Brian Myers and Matt Cardona's STOMP in Paradise provides an audacious tropical setting that is just begging to be explored.

Archer says the backdrops call back to the 8-bit and 16-bit days of the Super Nintendo and Mega Drive, where "everything was a lot simpler, less intricate" but crucially "fun". Hermann, meanwhile, says that refining the game's aesthetic language, specifically managing the number of sprites and animations, was the team's biggest technical challenge. "I think wrestling games probably have the highest number of sprites, due to the variety of the moves that can be performed," Hermann adds. Asides from *WrestleFest*, *RetroMania*'s in-game sprites, and gameplay, were inspired by a "ton of great and not so great wrestling games from the past", such as *Saturday Night Slam Masters*, *3 Count Bout*, *Tag Team Wrestling*, *Mat Mania*, *Pro Wrestling* and *WWF Superstars*.

However for a small indie team now in its third year of development, 2020 has proved particularly difficult. Hermann explains, "2020 has been a challenging year for a lot of reasons. But the biggest thing is that you don't know what you don't know. I have a background in software engineering but this is the first time I have designed and produced a game. I have definitely made mistakes along the way, but the end product will make it worth it."

> "WE'VE JUST KIND OF SCRATCHED THE SURFACE, AND WE'RE TAKING THE CAUTIOUS 'WAIT AND SEE' APPROACH. BUT AS WE MOVE FORWARD, WE'RE STARTING TO PLAN"
> **MIKE ARCHER**

Archer, on the other hand, is as experienced as they come. Though for a moment it looked like COVID-19 might have the team on the ropes, Retrosoft refused to tap out. "The pandemic kind of put us on hold for a week and a half, but look, nobody wants to use that as an excuse. So, we've just had to work a little bit harder and a little bit faster and the guys over there are killing it." With the whole team working remotely from home, Archer has been playing the game ten hours a day for the past sixty days. However, while he's been focused on product development and licensing, marketing, PR and sales, the coders have been doing the "heavy lifting". "That's where the burnout is real," Archer adds.

With *RetroMania* set for release on 26 February – just in time for *WrestleFest*'s 30th anniversary – Hermann is excited, "Time to party like it's 1999, in 2020!" The title will be getting a Limited Run Games release, and will also be laying the smack down on the upcoming iiRcade connected arcade machine platform. Hermann continues, "Seriously though, we are looking to recapture the magic of those great 2D wrestling arcade games from the Eighties and Nineties. There is something to be said for how easy it was to just pick up and play those games of that era. And we have the added bonus of today's technology." *

Future Classic

Modern games you'll still be playing in years to come

Info

- **System:** PC, Mac, Switch
- **Year:** 2020
- **Publisher:** Supergiant Games
- **Developer:** Supergiant Games
- **Key People:** Greg Kasavin, Jen Zee, Darren Korb

Go Deeper

» *Hades* was nominated for six Golden Joysticks, including PC Game of the Year and Best Visual Design. It went on to win Best Indie Game and Critic's Choice.

» Supergiant watched streamer runs, read feedback and created votes on Discord to aid the game's development.

» [PC] The weapons Zagreus has access to are all unique and take a good while to master.

Discover how Greek mythology, blisteringly good combat mechanics, oodles of collectible items and an incredibly strong focus on story-led narration resulted in one of the best roguelikes of recent memory. Prepare to escape the underworld again and again and again

Words by Darran Jones

HADES

THE BACKGROUND

When Supergiant Games set about making its fourth game, it decided to create it as unconventionally as possible. Instead of following the same development path it had trod with *Bastion*, *Transistor* and *Pyre*, the team decided that Early Access would be a more suitable way to progress. This continued with the story itself. Originally, the team had decided that *Hades* would be based on the well-known Greek story of Theseus and the Minotaur, but it was planning to tell it in a new way. "Each time it would be narrated differently, like a myth that's told in different ways as it passes from generation to generation," writer and designer Greg Kasavin told *Edge* in issue 351. "That idea was exciting to us."

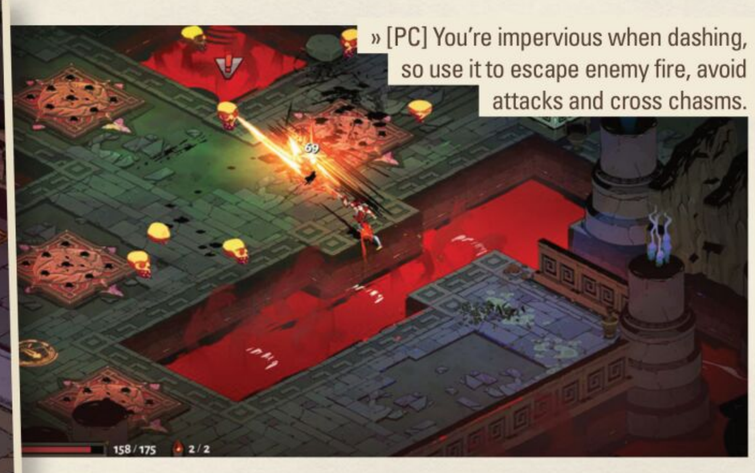
As exciting as that narrative strand was, things took an abrupt turn roughly three months into development when Greg discovered that Hades had a son called Zagreus. The character's relative obscurity was too tempting for Greg to resist and a new plan began to form. Rather than focus on navigating a labyrinth, the focus would now be on Zagreus attempting to flee the underworld, ascending upwards with Greg telling *Edge*, "The term I used was 'a reverse *Diablo*', where you'd fight your way to the surface". And as it turns out, Zagreus has one glorious fight.

THE GAME

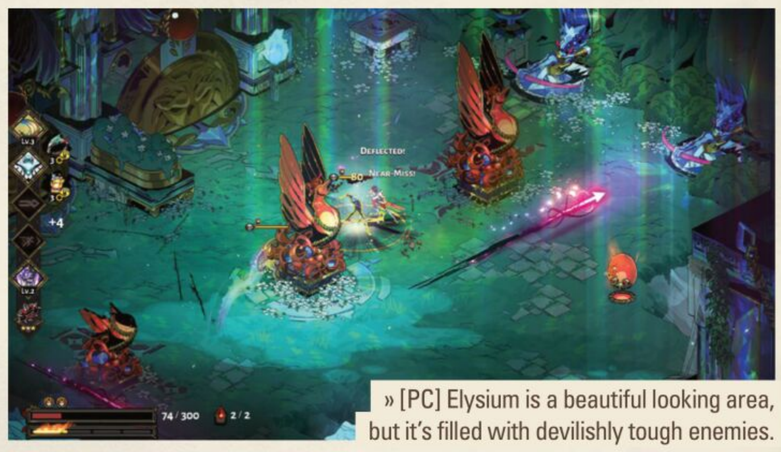
We've mentioned earlier this issue about the recent popularity of Metroidvanias, but roguelikes have also become increasingly popular in recent years and that was the path Supergiant Games chose to forge with *Hades*. Utilising an isometric setting – a graphical choice it shares with *Bastion* and *Transistor* – *Hades* is rather unusual as a roguelike as the biggest impetus that makes you want to progress is its genuinely excellent story. As Zagreus embarks on his difficult quest he discovers powerful Boons from the Olympian Gods, which not only greatly aid his progress, but offer subtle insight into his relationships with each god, from Zeus and Poseidon, to Athena and Aphrodite, and his own father, Hades.

Slowly, over the course of many deaths, you'll not only get a better understanding of where Zagreus sits in the Greek pantheon, but also learn the true reason for his determined ascension (don't worry, we won't spoil it

» [PC] Skelly is a handy servant you can attack while you test out the abilities of new weapons.



» [PC] You're impervious when dashing, so use it to escape enemy fire, avoid attacks and cross chasms.



» [PC] Elysium is a beautiful looking area, but it's filled with devilishly tough enemies.

» [PC] In addition to the bosses that guard each level's exit there are also smaller mayors to tackle.

Things of note

CROSSING OVER

Supergiant Games recently enabled an update for *Hades* that lets you cross-save your game across the Switch and PC, so you can now slay whenever and wherever you like.

MIRROR, MIRROR

One nice touch to the Mirror of Night is that there are typically two paths to choose, meaning you have plenty of upgrade options.

DYNAMIC BOSSES

Hades' mayors can be incredibly challenging on early runs. Complete the game and even tougher versions with new techniques appear. Yikes!

POWERFUL TRINKETS

Give someone enough nectar and you'll eventually receive a Keepsake – a handy upgradable token that grants a unique bonus.

GODLY BEAUTY

Jen Zee's art style for *Hades* is absolutely gorgeous, with sumptuous locations and interesting interpretations of the famous gods.

here). Those many tantalising story strands prove to be a great reason to return to *Hades* after you've suffered a great defeat, but they're not the only reason.

Hades is driven by an excellent combat engine and Zagreus proves to be no slouch when it comes to handling weapons. Initially he only has access to a sword, but there are further weapons that can be unlocked that range from a powerful bow to a useful shield, which can be thrown at enemies like a boomerang. Each weapon is effectively a new fighting style for the player to master and it's a testament to the team's design that Zagreus feels so different to use when you're utilising them.

Weapons aren't the only unlockables to be found in *Hades*. Zagreus can slowly enhance himself with the Mirror of Night by collecting Darkness, while Gemstones can be used to upgrade The House of Hades (the multi-roomed area Zagreus returns to whenever he dies). In addition to unlocking weapons, Chthonic Keys also unlock additional choices at the Mirror of Night, while collecting Ambrosia enables you to strengthen your bonds with the various characters and gods you meet (you may even get a reward for your generosity). Collected items typically carry over after Zagreus dies. Coins are the only currency that will be lost upon dying, so make sure you spend them whenever the opportunity arises (typically when you complete a stage or meet up with Charon, the boatman of the river Styx).

While there are numerous ways to increase your chances of victory as you attempt to leave the underworld, the many Boons granted by *Hades*' gods will typically play a significant part in determining the success of each run you make. Many of them are themed around the gods that bestow them, so those from Zeus have a distinct lightning theme, while those from Hermes aid evasion and speed. Boons come in a variety of rarities and you'll typically have a selection to choose from whenever they appear.

Choice in general is another recurring theme of *Hades* and there are plenty of opportunities to steer the game in the general direction you want to play. Each randomly generated room typically has multiple exits which tell you what item you'll receive upon clearing it of monsters, meaning you can increase your health, gain more coins and Gemstones or amass Darkness with very little effort.

WHY IT'S A FUTURE CLASSIC

It's little surprise that *Hades* has won numerous awards since leaving Early Access in September 2020. Its wonderfully tight combat mechanics are married to a wealth of enhancements and a deep, ever-evolving narrative thread that makes it stand apart from the many great roguelikes that are currently available. Brilliantly themed with superb character design, excellent audio and an entertaining voice cast, every run of *Hades* feels fresh and exciting with the knowledge you've learnt from previous deaths helping to shape your newest run. Yes, there's a small amount of randomness that means some runs will be more difficult than others and yes we'd have preferred more bosses to fight, but these are minor quibbles that won't stop you from enjoying the sheer ambition that *Hades* presents. Here's hoping that the million copies that Supergiant Games has shifted in the last two years is enough to convince the talented developer to make a sequel. ✱

BETTY RYAN

From colour vector coin-op Quantum to conversion capers on Atari's home consoles, Betty Ryan takes us back to her groundbreaking days in the early Eighties

Words by Paul Drury

As the first female engineer hired by General Computer Corporation, Betty blazed a trail, both for women in the games industry and on-screen with her dazzling coin-op debut, *Quantum*. The company had made its name producing *Super Missile Attack*, an ingenious hack of *Missile Command*, and the outcome of the resulting court case led to an agreement with Atari to create both arcade and console games. She worked closely with Doug Macrae, the cofounder of GCC, as well as Mike Horowitz and Steve Golson, part of the team that produced *Ms Pac-Man* for Bally Midway. Though she had to battle gender stereotypes and the attitudes of some unreconstructed male coworkers, she speaks about her time at GCC with affection. "I've rarely done interviews about my time making games," says Betty, with a smile, "but this has been fun!"

You've spoken at the American Classic Arcade Museum at Funspot in New Hampshire to college students about your time making games in the early Eighties. How did you find that whole experience?
It's a very different world now. It seemed more like a frontier back then. A lot was undiscovered and a lot of what we did felt like hacks. Or 'clever implementations' I should say [laughs].

Were any of the students surprised that a woman was making games in those pioneering days?
One girl asked me about what it was like to be a woman in the industry back then and it caught me off-guard. When I joined GCC [General Computer Corporation] in 1982, I was the first female engineer and I was the only one for a long time. You probably know the stereotype of how young, male engineers can behave. My experience was… mixed. Overall, it was positive but at times I found it very difficult.

Did you encounter some sexism, then?
When I was in high school, I took a Saturday course in Fortran at MIT [Massachusetts Institute Of Technology] and in one class, I asked a question about the mechanics of how a print command worked. The teacher, who must have been a male grad student, said, 'It figures the girl would ask that.' I was taken aback. I'd been to a co-ed Catholic School and I had never experienced anything like that. I took it personally and didn't go to any more of those classes.

Did things get better when you went to Harvard?
I was there in the late Seventies so female students in the computer science [classes] were rare. There were four or five women and we stuck together like glue, not because we felt discriminated against – we just liked each other. I didn't experience any hostility at Harvard, which meant when I graduated in 1980, I was totally unprepared. My first job was at a management consultancy and it was harsh. The firm had their offices overlooking the harbour in Boston, the salary was great and I loved the programming, but even those positives weren't enough to outweigh the misogyny there. After a year, I started looking for another job.

» Betty with the prototype Quantum cabinet, taken from a GCC recruitment brochure (right), and Betty today (above).

How did you get into programming arcade games?
I kind of fell into that. Some of my coworkers lived with the guys who were starting GCC. I had other job opportunities but once I talked to them about games there was no contest.

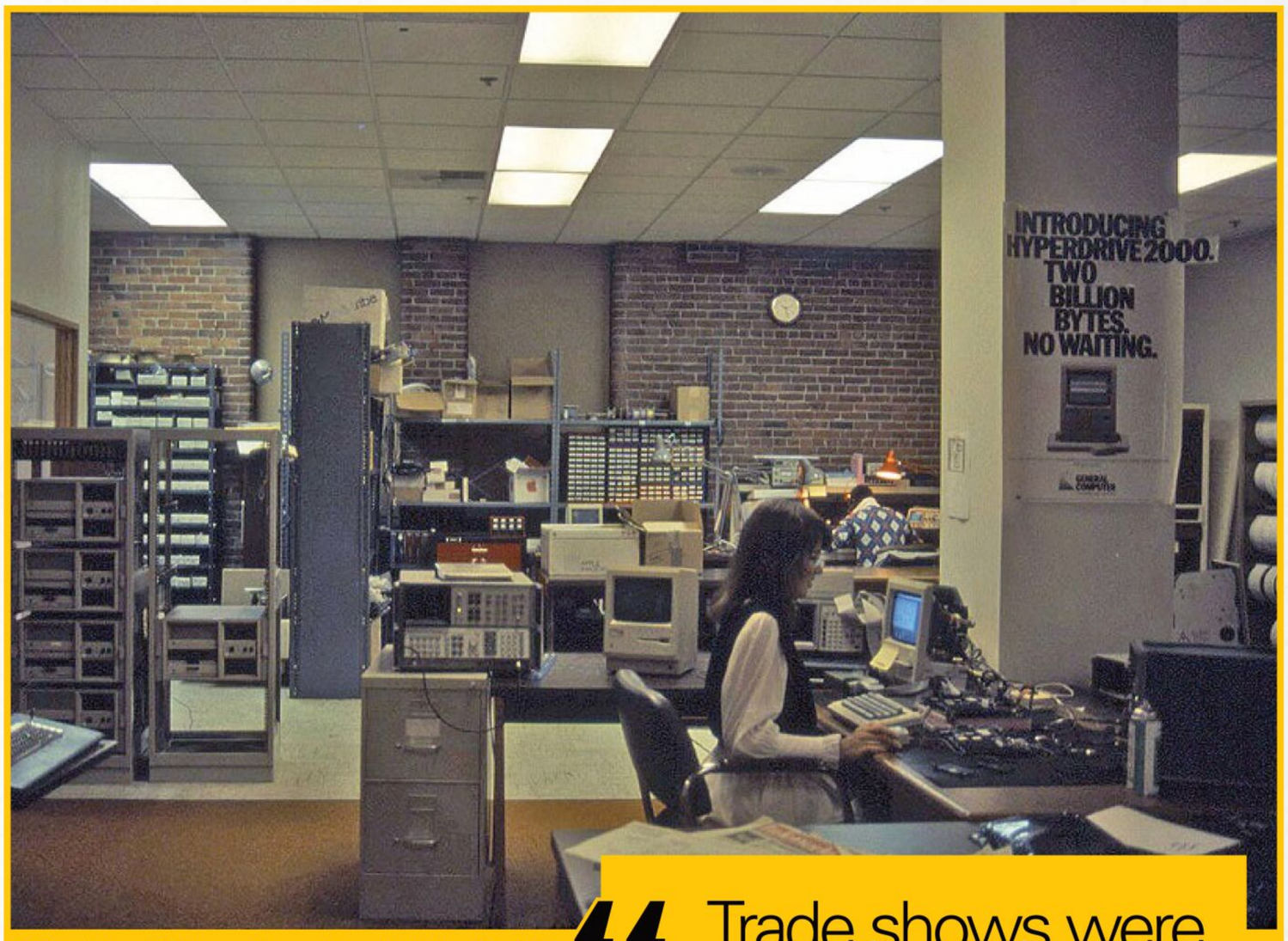
What was the interview like?
They asked me what my high score was at *Galaga*. I was pretty good at it so I could answer that [laughs]. Then they asked me what magazines I read. I think they were thrown because, first,

Quantum
“At my interview for GCC, they asked me what my high score was at Galaga”
Betty Ryan

SELECTED TIMELINE

GAMES

- **QUANTUM** [1983] ARCADE
- **POLE POSITION** [1983] ATARI 2600/5200
- **DIG DUG** [1983] ATARI 5200/7800
- **ATARILAB** [1983] ATARI 400/800
- **MILLIPEDE** [UNRELEASED] ATARI 2600
- **POLE POSITION II** [1987] ATARI 7800



» Betty in the mid-Eighties, working on software for the HyperDrive 2000, a Macintosh accelerator board. Photo courtesy of Steven Szymanski.

I was a girl, and second, I was from Harvard and everyone else was from MIT. It was probably the only place in the world where you were looked down on for going to Harvard [giggles].

Did they ask you anything about your coding ability?
Yes, they wanted to see my code, so I showed them an operating system, like a virtual machine, I'd written as part of my course at Harvard. It was some pretty intense software. They had good recommendations from the other people I had worked with so they knew I could code. I'd written a lot of mathematical modelling software so I think they knew I had a good head on my shoulders.

You started at GCC in January 1982, just as *Ms Pac-Man* was about to bring the company huge success. Were you given much of an induction?
When I arrived, they had an Atari *Tempest* cabinet, which had been gutted, and one of the hardware engineers was trying to reverse engineer it to figure out how the logic board worked. They had added a trackball to the control board and on the screen, a colour vector monitor, was just one white ball in the centre. They hadn't worked out how to move it yet. They said they had this idea of it being a comet with a tail behind it and could I come up with a game based on that?

How did that tinkering evolve into the coin-op *Quantum*?
A comet is obviously in space but I really didn't want to do asteroids or spaceships, so what else could I do? Graphics are limited on a vector system, so objects really need to be small and wiry.

You cannot get much smaller than elements within an atom! Had you studied quantum physics at Harvard?
I had studied physics so maybe that's where it came from. It was really about what objects you could draw with a vector beam. There were a lot of physical restraints.

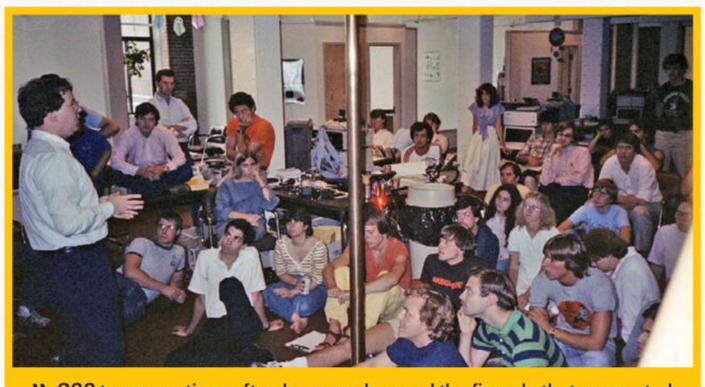
We understand the colour vector hardware was notoriously temperamental and potentially dangerous.
Oh yes. If you sent the beam drawing off in a wild direction, you could spark a fire! The hardware didn't come with a manual. We were trying to run a [16-bit] Motorola 68000 processor on hardware designed to run an 8-bit 6502 and we still didn't really know how to control the vector beam. At a company awards dinner, I won the 'Blown Fuse' award because I ran through boxes of them before I figured it out!

It sounds like you were on the bleeding edge of coin-op technology.
Tempest was written in assembler on a 6502 processor but we wanted to use a higher level language. The Motorola 68000 processor was brand-new and there were no compilers written for it yet, so I spent three weeks in my office writing the basic code structure for *Quantum* in Pascal on paper. When the Pascal compiler arrived, I typed in all the code but found its way of data array indexing was too inefficient. I had to rewrite all the code in C, again on paper, until the C compiler arrived!

> "Trade shows were filled with Playboy bunnies and women hired to attract men to booths. It all felt so separate from me. It was a different time"
> Betty Ryan

Were you doing all the coding for the game on your own?
Yes, but the way the lab was set up at GCC was like a bull pen. We were all in one very big room with all of the development going on, so you constantly had people coming by and playing your game. That can be good and bad.

What do you mean?
Feedback can be great when it's constructive, but the comments were rarely positive and the criticisms were rarely polite. When you've literally worked hundreds and hundreds of hours on it for months and months, trying to get the game done, that could be difficult to take. I don't think they were intentionally brutal. It was just how a few of them were.



» GCC team meetings often happened around the firepole that connected the two floors of their offices. Betty is standing at the back in the white skirt. Photo courtesy of Steven Szymanski.

» Since retiring, Betty can be found playing the Irish fiddle in Boston pubs with (left to right) her brother Jack, sister Carol and father John.

FIVE TO PLAY A quintet of brilliance from Betty

QUANTUM

■ The beautiful colour vector graphics and wildly original gameplay – spin your trackball to encircle subatomic particles – make this a real lost gem from the golden age of arcades. If you get to play it on an original cabinet, you'll agree it's Betty's masterpiece.

POLE POSITION

■ Prepare to qualify! The coin-op holds a special place in many gamers' hearts, and Betty's work on both the 2600 and 5200 console versions was impressive, given the limitations of the hardware. The 5200 release even has the blimp and snow on Mount Fuji.

DIG DUG

■ Whether you are a fan of Namco's dragon-pumping underground adventure or agree with our editor's withering appraisal, you can still appreciate the effort here. Betty's home conversions retain most key gameplay elements... but *Mr Do!* still rules supreme.

POLE POSITION II

■ The sequel to the venerable arcade racer adds three more tracks, including Long Beach with its long straights and the chicane-heavy Suzuka. Betty worked on the Atari 7800 home console version, which became a pack-in title for the machine's launch.

MILLIPEDE

■ There's a certain irony in that the console conversion Betty is most proud of never actually received an official release. The ROM is easy to find nowadays, so why not compare GCC's effort with Atari's and decide for yourself which bug-blaster is best.

Were the comments just directed at your coding?
No. Listen, the majority of the guys were great friends and coworkers but it only takes repeated behaviour from a few to undermine your confidence and intimidate you. This was the early Eighties and there wasn't the awareness then that there is now about what is unacceptable behaviour. There were comments about what I wore, how I looked, even physical pats on my bottom. At my previous job I was told by management that I just had to let it go and understand that these were awkward engineers who didn't know how to act around women. That was the prevailing attitude in those days. Women had to just accept it and get along.

On top of all this, you are trying to make a highly original game on cutting-edge arcade technology.
I was working on *Quantum* for pretty much all of 1982 and there was a lot of pressure. The starfield in the background was the most difficult thing to implement. You have to draw that efficiently. You can't just bounce the vector beam all over the screen because you only have a few milliseconds to draw it all, so you have to optimise the order of the objects to be drawn. Between levels, I was trying to mimic the graphics of the Millennium Falcon's jump to hyperspace like in *Star Wars*... that was really hard!

The game has a wonderful openness, allowing players to develop their own approach to encircling the particles. Did you watch people play and smile at their different strategies?
I guess so. I do remember watching people play it in the arcade when it was out on test and that was fun, but most of the guys at work played it aggressively – and fast! There was one guy who could circle the whole screen at the start of a level and clear it. The game actually shipped with that bug because I could never figure it out [laughs]. To be honest, that strategy annoyed me because it seemed like, 'Why bother playing it at all?' There was no finesse.

On the high score table in *Quantum*, we love how you can enter your name 'freehand' using the trackball. Weren't you worried that players might draw obscene pictures? [Is that what you did, Drury? – Ed]
[Laughs] I was naive. And stupid. And if it was too bad, you unplugged the machine and it would reset to 'Betty'.

You were producing *Quantum* for Atari. Did any representatives ever come and visit GCC to check on your progress?
Atari was owned by Time-Warner and around the spring of 1982, Manny Gerard and Skip Paul [heads at Warner] visited GCC to check up on their investment. We were still pretty small and had been working 100-hour weeks prior to their visit so we had something to show them. Straight after they left, the whole company got on a plane and went to Disney World as a reward.

What a fantastically Eighties way to celebrate.
The second time they visited, Quincy Jones came with them.

You mean the producer of Michael Jackson's million-selling album *Thriller*? Why?
I don't know. Maybe he was a personality at Warner or maybe he liked games!

As you can probably tell, we love *Quantum*, from the wildly original concept to the beautiful vector graphics and cabinet art, yet only 500 were ever made. That must have been disappointing.
It came out in January 1983, just as the arcade market was collapsing. Well, I hope that's why so few were made. To be honest, I was just glad it was done. It had taken over my life. Right after finishing it, I started work on *Pole Position* for the Atari 5200.

» Hanging out with Mr *ET* at a Time-Warner cocktail party at the CES show in Las Vegas in 1983. Left to right: Doug Macrae, Mike Horowitz, Steven Spielberg, Betty, Josh Littlefield, Kevin Curran. Photo courtesy of Doug Macrae.

Were you happy to move into developing games for Atari's home consoles?
The nice thing about the home games was that you worked with a partner. I was the only one working on the software for *Quantum* and it's much nicer working with someone else. And I loved the original *Pole Position*.

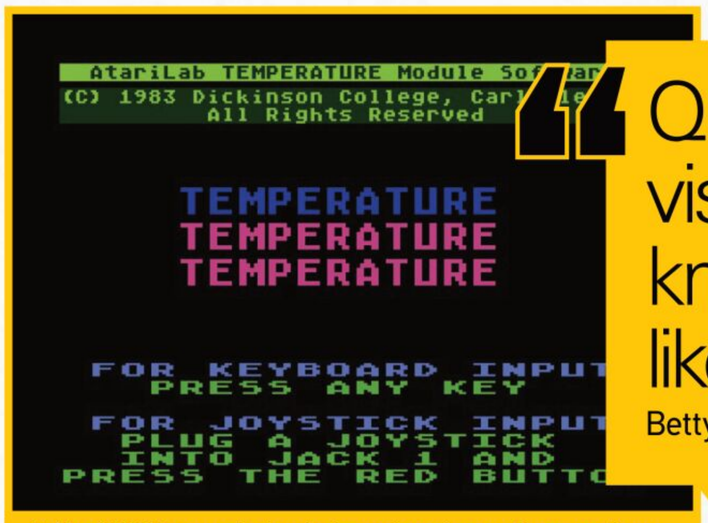
It can't have been an easy game to convert, though, what with the pseudo-3D effect.
Oh, I loved the work. The programming, the graphics... the graphics can be a creative outlet beyond the programming. And I'm a perfectionist. I had pages and pages of graph paper with bitmapped images for doing the tracks and the explosions. There was a lot of trial and error to see what it would look like on-screen, working out how many iterations of the image you'd need.

Your partner on that game was Mike Horowitz, we believe, one of the key people at GCC.
Mike had worked on *Ms Pac-Man* and we shared an office. He was a good friend and once you have some friends around you, it's a really good support system. It helps you steel yourself against the more unpleasant elements.

How did you divide up the work?
You divide it between two people: one would do the kernel, which ties everything together, and the other would do the objects and the gameplay. Mike did the kernel and I did all the gameplay. Mike was great to work with. I used to play racquetball with his wife, Eileen, and we became good friends.

You converted *Pole Position* to the Atari 2600 and 5200 and then worked on the sequel, *Pole Position II*, for the 7800. Let's talk about those different machines…
They were very different. We were back on the 6502 [processor] for the home games and with the 2600, you only had 128 bytes of RAM, so you started looking at how to use individual bits. There are eight bits in a byte so if you have a variable that you knew would never go above seven, you would only need three bits. You could use the other five for something else. Every bit counted. That was the biggest challenge – trying to get it into 128 bytes!

That can't have been so much of a concern with the 5200…
Oh yes, the 5200 had a lot more RAM but what annoyed me about that machine were the controllers. They were very difficult to use. On a game like *Pole Position*, where you're constantly steering, it was really frustrating to control. You couldn't get the manoeuvrability you expected.



» [Atari 800] Betty worked on the innovative science software package AtariLab with David Crane. No, not *that* one, the other one.

> Quincy Jones came to visit GCC once. I don't know why. Maybe he liked games!
> Betty Ryan

» [Atari 2600] We think *Millipede* is actually a better game than its more famous prequel, and Betty's unreleased 2600 version is a fine blaster.

What about the Atari 7800?
Ah, the 7800 was great. It was much more advanced. It seemed like it had infinite RAM at the time [laughs]. So much easier to write for.

You also converted *Dig Dug* to the Atari 5200 and 7800. Were you given any source code to help with that project?
No, we just had the arcade machine and played it. A lot. I did that game with Ava Robin-Cohen, who was great to work with. She was also a Harvard graduate. She'd worked for another tech company in the same building as GCC. She was fun.

Other women were joining the company, too, like Patty Goodson, who produced a lot of the music for games.
Yes, Patty was a classically trained pianist. She's lived in Prague for the past 20 years, performing and recording. She worked on the 7800 version of *Pole Position II* with me. Her brother had gone to MIT with Doug [Macrae] and Kevin [Curran – cofounders of GCC] so that's how they knew of her and asked her if she was interested in working on games.

And your sister, Carol Ryan Thomas, joined, too.
Oh, that was great. We were really close. She was a videogame tester and debugger and worked for GCC for a long time, even after the videogame work stopped.

» [Atari 5200] *Pole Position*: those damn 5200 controllers don't help when it comes to following the racing line.

Do you think it was a conscious decision by GCC to recruit a more gender-diverse staff?
No, I don't think it was an active effort to recruit women. I fell into it because of having worked at the management consultancy and GCC needed people right away because of this Atari contract they had to produce arcade games. The women came because GCC knew of them or they worked in the same building.

Did you go to videogame trade shows?
Yes, we often went as a company because Atari would have a booth with our games on it. I remember John Mracek [who worked on *Desert Falcon* and *Phoenix*] was standing next to me and this guy walks up and asks me, 'Honey, what did you know about videogames last week?' John stepped up and said, 'Hey! She's one of our engineers. What are you talking about?'

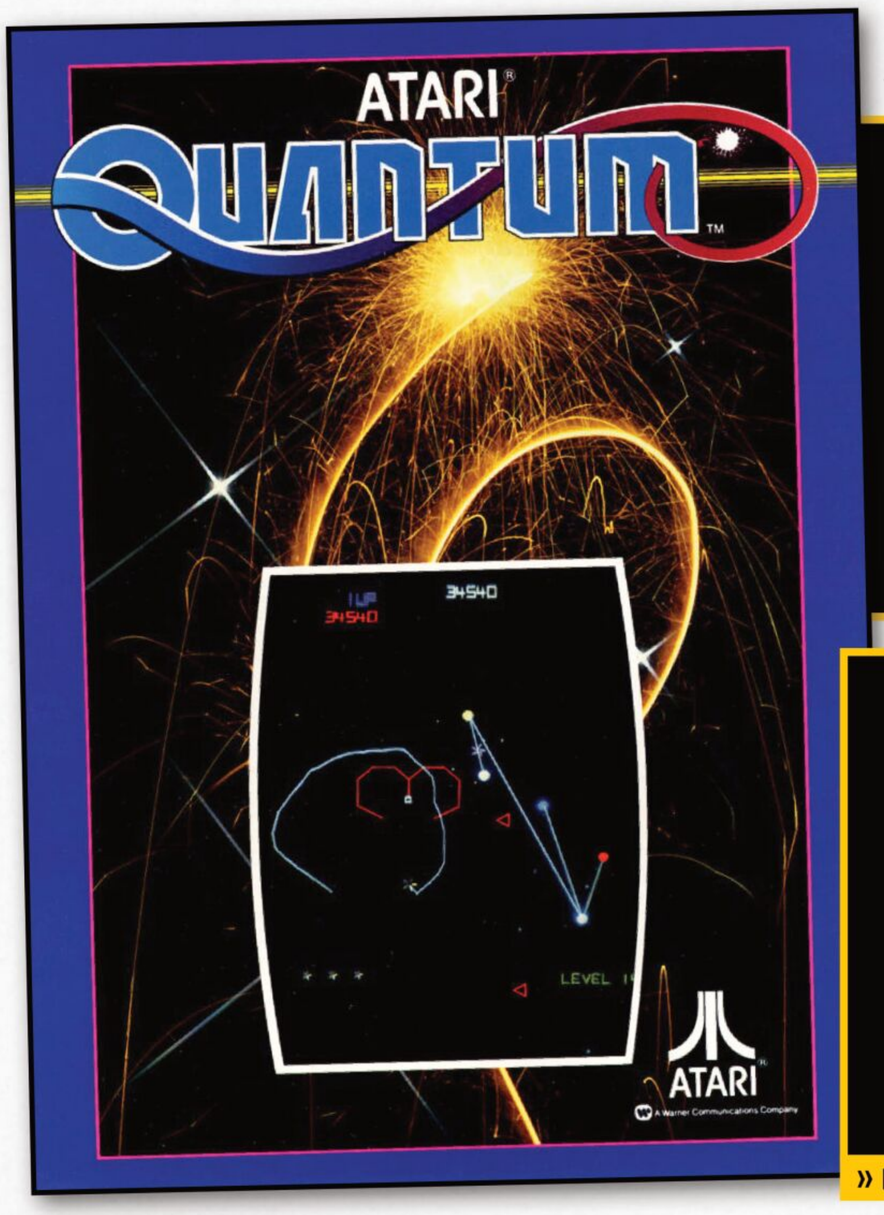
The guy had assumed you must be a 'booth babe' because you were a woman at a videogame show, right?
Yes… but then the place was filled with Playboy bunnies and women hired to attract men to booths. It all felt so separate from me. It was a different time. I didn't have a realisation of how bad things were back then. Sometimes you just walk away because it's useless arguing with some people.

We noticed that one of the games you worked on was never released. What happened with the GCC version of *Millipede*?
There was a lot of competition for the titles Atari were going to convert for the home market between GCC and Atari's own group of programmers. Doug [Macrae] is very ambitious. He'd heard they were going to go with Atari's group, so he grabbed me and said, 'Let's get this done! We can get ours finished first and it'll

BACK IN THE GAME

How Betty got back into coding

Though GCC had already moved out of the videogame business when Betty left the company in 1988, it wasn't quite her last involvement with games. In the early Noughties, her son, John, still a teenager at the time, was setting up a website to review and rate tech products. "He needed help with it," remembers Betty, "and was hiring people online and I said, 'I can do this!' But I was a mom – he didn't trust me to touch it. Eventually, he let me, and once he saw what I could do, the floodgates were opened and he was always asking me to do stuff for him. That dragged me back in." Skip ahead a few years and her experience of web design and coding PHP led her to collaborate with some old friends. "Doug Macrae and a couple of other GCC guys played *World Of Warcraft* all the time and they wrote this engine which would give advice to players about how best to use their inventory and so on. They needed someone to write HTML because Firefox, Explorer, Safari, they all rendered HTML differently. I even built them a website, using JavaScript," she smiles.



» With only 500 produced, it's hard to play *Quantum* on an original cabinet, but if you ever visit ACAM at Funspot in New Hampshire, USA, make sure you spend some time on it.

» [Arcade] *Quantum* was Betty's only coin-op but what a thing of beauty it is.

be better so they'll have to choose it!' So we did – in three weeks! Normally, a game would take months. Doug did the kernel and I did the graphics and gameplay and you know, it was the game development cycle I was most proud of, but then it never got released.

Do you know why?
It was politics, I think. Atari management decided it would affect the morale of their engineers if they went with our version. I know I'm biased but I think our game was better.

Those three weeks must have been a real crunch. Was there a culture of working long hours at GCC?
Oh yes. There was a cafeteria set up with its own chef, so you never had to leave work. But then almost everyone was young and single.

Does that mean there was lots of partying, too?
No, we were nerds [laughs]. We once went out as a group to see the midnight showing of *Tron* when it came out. That was about it.

After working on all these arcade games, you collaborated with David Crane on AtariLab. How did that come about?
Some university wanted scientific software running on an Atari computer. There were sensors, like a thermometer, and we did the graphics to represent the sensor readings. It wasn't as much fun as working on games but David Crane was lovely. He's a really nice guy and great to work with.

Did you ever play *Pitfall!* with him?
Ah, this is a different David Crane! There are two in the games industry. This is the other one [laughs].

Whoops! You stayed at GCC when they left the games business and moved into hardware, notably an internal hard drive for the Mac. Then in 1988, you left work one evening, went straight to the delivery room, gave birth to your first child and never came back.
If I'd been happy where I was, I'd have considered returning but as time went on, I was back to being the only woman engineer again. I was sort of relieved to have the option not to go back.

There is a lot more awareness of how women were treated in the games industry, and in the workplace in general, back in the Seventies and Eighties. Do you look back on those days with fondness or some anger at the attitudes that you faced?
[Long pause]. Both to be honest. And I don't know if things have improved, given Gamergate and the harassment that goes on online. I think companies are more aware of litigation and I know there would be a different response from a manager if I went to them today about the harassment I got back then… but in some ways, it's worse because it's more subtle now. That can be harder to deal with than the more overt stuff.

Many thanks to Betty, Doug Macrae and Steven Szymanski for permission to use their original photos, and Martyn Carroll for additional help.

YOU ASK THE QUESTIONS

Readers can get involved at www.retrogamer.net/forum

MERMAN: Were you good at playing the arcade games you converted?

I was good at *Millipede* and *Pole Position* – we had this setup in the lab with a big screen and a steering wheel, and when you played it in the dark, it felt really good, like you were actually driving. *Dig Dug* I didn't really like as a game. [That is the right answer – Ed.]

NORTHWAY: I want to hear more about the development of the Atari 7800, especially if GCC came up with the use of a line buffer.

GCC did the chip design for the machine and it was a huge project. It was kind of like a skunk works, done separately from the videogame stuff. They did it in the basement! I was in software at GCC, not hardware, so I don't know the history of how the line buffer was developed. Steve Golson worked on that project, so he'd know. [We will ask him – Paul.]

BOUNTY BOB: Have you thought of getting back into making games?

It's funny you ask, because about six years ago, someone from England contacted me about making an iPad version of *Quantum*. I had experimented a little with apps, and I had seen a game on the App Store that was similar to *Quantum* in that you had to circle things… but in the end I said no.

ERIC: Did you enjoy working on the various versions of *Pole Position*?

I enjoyed working on them all. There's something really captivating about moving to a new machine and learning things from scratch. I'd say the 7800 version was my favourite as that had the best graphics, though with something like *Dig Dug* on the 2600, the gameplay is good enough. You look at the graphics now and they're horrid, but at the time the mentality was focused on the gameplay and that's what counted.

Earth Defence Force 2017

NOT AS JANKY AS IT USED TO BE

» RETROREVIVAL

» XBOX 360 » 2006 » SANDLOT

Last month I mentioned how Microsoft's new Xbox Series X significantly enhanced the Xbox classic *Panzer Dragoon Orta*.

This month I'm going to do the same for an early Xbox 360 release: Sandlot's outrageously fun *Earth Defence Force 2017*.

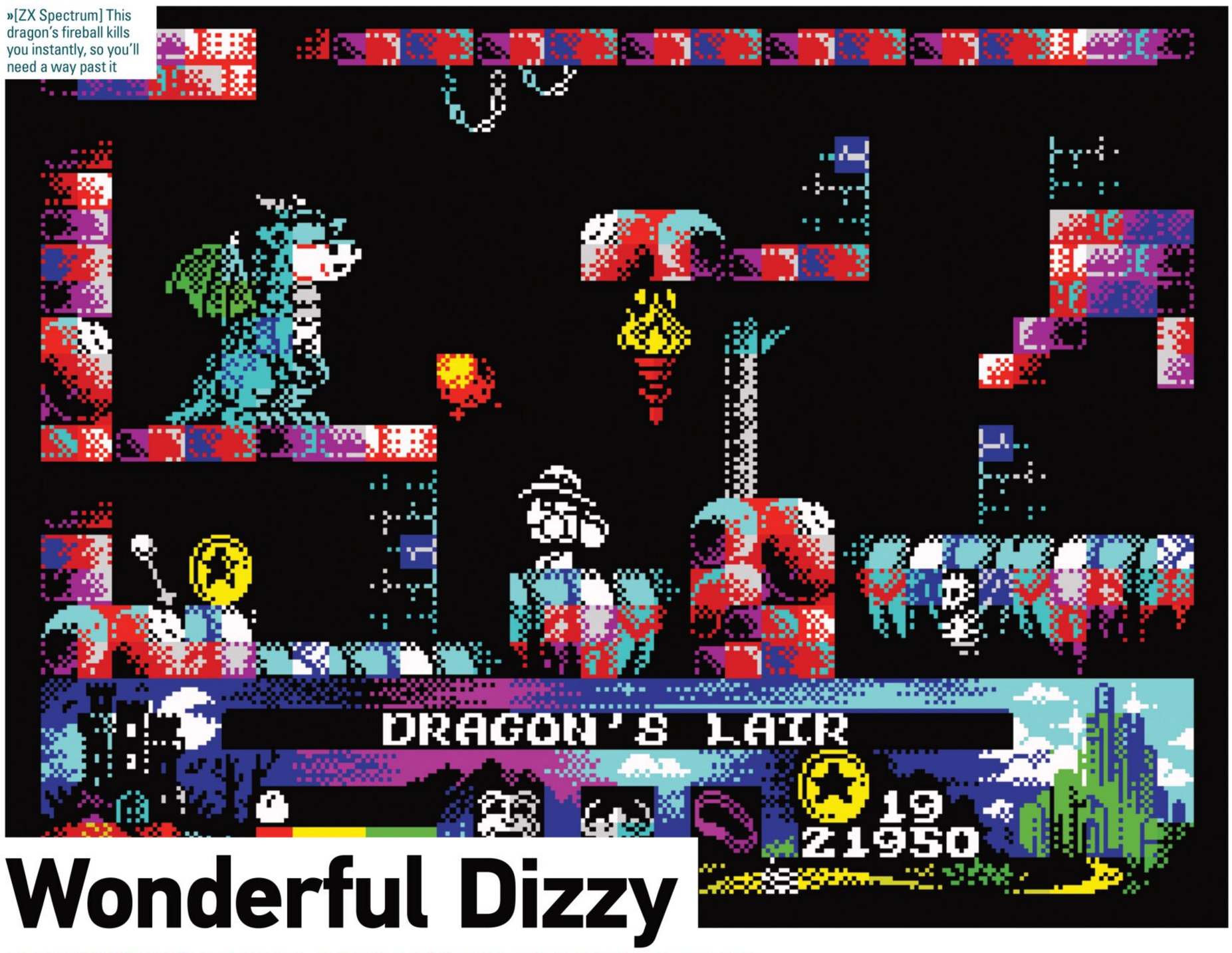
It's safe to say that Sandlot's game is a revelation on Microsoft's new console, at least from a technical point of view. The original game had numerous performance issues on the 360, with the framerate being particularly poor once large numbers of enemy ants, spiders and gigantic robots began to fill the screen, which was often. These issues are completely eliminated on Series X and the game now runs at a gloriously smooth 60fps, which completely transforms how the game plays. Granted the textures look a little dated now, but smart use of HDR (High Dynamic Range) and that high framerate ensure that Sandlot's game remains a lot of fun and looks great.

Battles could be a nightmare on later difficulty levels on the 360 because the sheer amount of things on-screen would directly impact the responsiveness of your soldier. That's a thing of the past now, but the overall smoothness of the game does highlight that in many ways it remains every bit as lumbering as the gargantuan metal behemoths that dominate several of the game's 53 levels.

While the core controls for your soldier are perfectly serviceable, the many vehicles you can jump in are really starting to highlight the game's 15 years. Each and every one of them is an absolute pig to control. In fact, they're so rubbish I soon gave up on them and simply concentrated on seeking out the game's silly array of weapons and using them to level the many buildings that litter each stage.

It might be an Xbox 360 game, but aside from its sparkly new makeover there's absolutely nothing modern about *Earth Defence Force 2017*. It's an unabashed tribute to the arcade shooters of old, with outdated controls and a laser-like focus on mayhem to match. And that's probably why I found myself so compelled to complete it over a single weekend. ✱

>> This issue we've been enjoying a brand-new Dizzy game, the latest miniature cabinet from the Quarter Arcades range and a new Space Invaders compilation



»[ZX Spectrum] This dragon's fireball kills you instantly, so you'll need a way past it

Wonderful Dizzy

IS DIZZY'S WONDERFUL NEW ADVENTURE HIS BEST YET?

INFORMATION

- **FORMAT REVIEWED** ZX SPECTRUM 128 OR HIGHER
- **ALSO ON:** NA
- **RELEASED:** OUT NOW
- **PRICE:** FREE
- **PUBLISHER:** TEAM YOLKFOLK
- **DEVELOPER:** TEAM YOLKFOLK
- **PLAYERS:** 1

Say what you like about Dizzy, but the Oliver twins' creation certainly has legs. Since the mobile remake of *Dizzy: Prince Of The Yolkfolk* in 2011 we've had a selection of loft discoveries, several successful Kickstarter projects of physical releases based on said loft discoveries, a rather excellent Evercade cartridge and about a million features in **Retro Gamer**. It's all culminated with this, a brand-new *Dizzy* game, made with the blessing of both Codemasters and the Oliver twins and it's as wonderful as its name suggests.

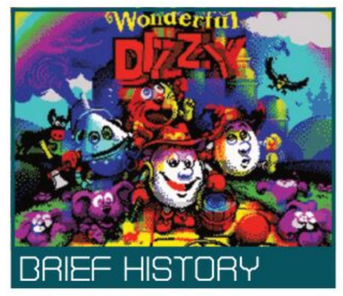
For those who may be unaware, *Wonderful Dizzy* has been created by the talented team that worked on the Spectrum remake of *Crystal Kingdom Dizzy*. The key thing here though is that both Philip and Andrew Oliver were involved too, working on the game design with Yolkfolk's Andrew Joseph, and boy does it show in the end product. From the moment *Wonderful Dizzy* starts it's obvious that a lot of love has been poured into it from everyone involved.

Wonderful Dizzy is designed to run on any 128K+ Spectrum (as well as the Spectrum Next) or you can play it online at bit.ly/WonderfulDizzy. It's absolutely free, too, meaning there's no excuse to not give it a try.

Wonderful Dizzy is essentially a reimagining of *The Wizard Of Oz*, and starts off with Dizzy accidentally killing the Wicked Witch of the East. The Wicked Witch of the West soon turns up and captures Pogie, sending Dizzy off on a quest to save his beloved friend, as well as help a selection of characters along the way, including a Tin Man, Scarecrow and Cowardly Lion (all played by popular *Dizzy* characters). Needless to say they all need help and Dizzy is only too happy to oblige.

The Wizard Of Oz is known by all, so the key plot beats are incredibly familiar. The strength here comes from the characters you meet as they're all rather quirky and stay with you, whether it's the Tin Man who is obsessed with Eighties music and constantly quotes song lyrics, the Spectrum and C64-loving guards that guard Oz's home (and constantly bicker over which system was the best) to a

»[ZX Spectrum] The art team has done a fantastic job. There's never been a better looking *Dizzy* game on the Spectrum



BRIEF HISTORY

» The original *Dizzy* was released by the Oliver twins in 1987. A sequel, *Treasure Island Dizzy*, came the following year and interest in the games started to snowball. Three games appeared in 1989 and the series became so popular that the twins had to take a step back (*Fantasy World Dizzy* was the last adventure they worked on) handing over programming duties of the main adventure games to Big Red Software and taking on a supervisory role instead.

»[ZX Spectrum] Fall too far and you'll lose precious energy. It's better than smashing like a normal egg

✱ PICKS OF THE MONTH

DARRAN

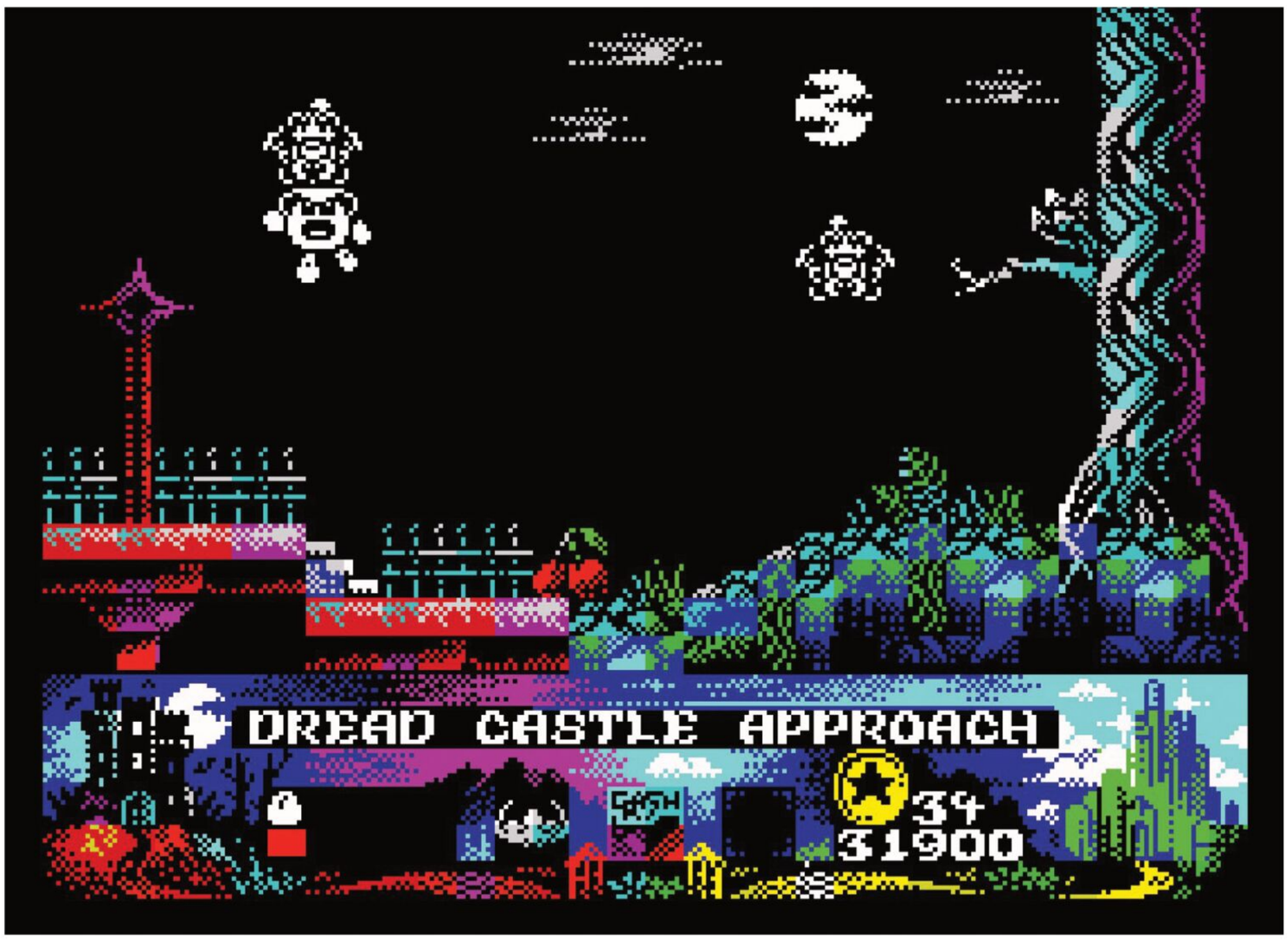
Wonderful Dizzy

It doesn't reinvent the wheel, but it does offer a very satisfying new adventure for the 8-bit hero.

NICK

Fatal Fury: First Contact

This was one of my first Neo Geo Pocket games, and it still plays magnificently so revisiting it has been a joy.



»[ZX Spectrum] These erratic enemies are a bugger to pass, but they do highlight Dizzy's lovely animation

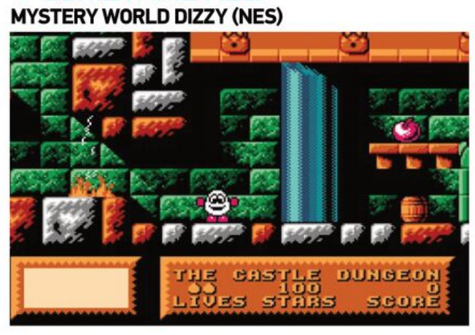
* WHY NOT TRY

▼ SOMETHING OLD

FANTASY WORLD DIZZY (VARIOUS)

▼ SOMETHING NEW

MYSTERY WORLD DIZZY (NES)



»[ZX Spectrum] You've only got three inventory slots, so make sure you manage them carefully.

»[ZX Spectrum] Some of the new characters are very amusing, including this bitcoin obsessed pirate.

»[ZX Spectrum] Some lovely cutscenes set up *Wonderful Dizzy*'s *Oz*-themed story.

pirate with a love for bitcoins. There are plenty of references to both the original *Dizzy* games and Eighties pop culture in general leading to plenty of smiles and a heavy whiff of nostalgia.

That nostalgia continues with *Wonderful Dizzy*'s puzzles, which will feel instantly familiar to fans of the series. Several puzzles are typically just fetch quests, requiring you to retrieve a specific item before a character will help you, but a few are a little more complex, but there's nothing that is super obtuse. While you can only carry three items at a time there's not too much backtracking as the team has opted for a far more manageable set of levels. In the case of *Wonderful Dizzy*, less is definitely more.

One of the things we always enjoyed about the original series is when you discovered a new item and instantly clicked as to where it could be useful. That same thing happens in *Wonderful Dizzy* and it's super satisfying when you finally solve a puzzle and unlock a little more of *Wonderful Dizzy*'s world.

And what a world it is. While this isn't the Next enhanced *Dizzy* promised by the Spectrum Next Kickstarter (a project the Dizzy team has now cancelled due to online abuse they've received) it's still a gorgeous looking game that really pushes the 128K Spectrums. Yes there's colour clash (it wouldn't be a Speccy game without it) but you've also got brilliantly detailed sprites, gorgeous looking locations and some rather lovely animation. It's a huge step up from earlier Spectrum *Dizzy* games and highlights the talents of programmer Evgeniy Barskiy, as well as graphic artists like Dmitri Ponomarjov, Oleg Origin, Alexander Filyanov, Jarrod Bentley and Marco Antonio Del Campo. Special mention also needs to go to Sergey Kosov's jaunty little tune.

As much as we've enjoyed *Wonderful Dizzy*, it's not quite perfect. The team have decided to play it safe, rather than push *Dizzy* in any new direction, and as a result it can sometimes feel a little by the numbers at times. Of course, many will argue that's also the game's strength, but it's still a pity that the new crouch button feels a tad underused and that it's not always clear what you're supposed to do next (one character for example gives you a one-time hint for helping a certain character before promptly falling back to sleep again). As we've said though, many just wanted to play a brand-new *Dizzy* game and in fairness that's exactly what the team has delivered. In that respect *Wonderful Dizzy* is a dizzying return to the original adventures that so many fans of the series loved in the late Eighties and Nineties and that's more than good enough for us. *

In a nutshell

If you're expecting a fresh *Dizzy* experience prepare for egg on your face. Anyone else is going to get eggs-actly what they were expecting. *Wonderful Dizzy* is a classic return to form that does the series proud.

>> Score **85%**

★ PICK OF THE MONTH

» *Dig Dug* is famously Darran's most favourite game. In fact, as a baby his first words were, "*Dig Dug*!"

Quarter Arcades: Dig Dug

» **Buy it from:** numskull.com » **Buy it for:** £129.99

Last issue we looked at the excellent *Dragon's Lair* cabinet from New Wave Toys and this month it's time to take a gander at the latest offering from Numskull's Quarter Arcades range.

One thing we've always liked about earlier cabs from the series is their presentation and *Dig Dug* is another knockout, easily emulating the colourful and cartoony look of the original arcade cabinet. The machine feels reassuringly sturdy to the touch, is quite heavy and has all the relevant features you'd expect to find on a full-size cabinet. The back of the cabinet features a power switch, volume control, an LED light to show power and charge, and a micro USB input port. The rechargeable battery that's included offers around four hours of play between charges.

The front of the cabinet looks great, with a light-up marquee and several other lit buttons, which gives *Dig Dug* a rather enticing look. The quality of the screen seems good, but unfortunately our cabinet had picked up a speck of dust, which was trapped under the glass screen and proved extremely noticeable during play. It's worth noting though that we've not experienced this on the previous cabs we've tested, but it has been very distracting on this one.

The emulation standard is up to the quality of Numskull's previous cabinets and feels very authentic, although the sprites did look a little soft, which could be down to the screen used or the emulation display options. Pressing both the one and two player buttons lets you access a service menu which allows you to alter the difficulty, number of lives and when you receive a bonus life. It's even possible to turn the demo music on and do a complete factory reset, although doing that will wipe your saved scores.

While it lacks many of the extras that made the *Dragon's Lair* cab such a joy to marvel at, the larger size makes *Dig Dug* much nicer to play on. Let's hope this standard continues for Numskull's *Bubble Bobble* and *Hyper Sports* cabs.

Fatal Fury: First Contact

» **System:** Switch » **Buy it from:** Online
» **Buy it for:** £7.19

While Code Mystics has done its usual solid work with this Neo Geo Pocket Color fighter, *Fatal Fury: First Contact* isn't one of the strongest examples of the game on its platform. It's a fine handheld approximation of *Real Bout Fatal Fury 2*, with a reduced character roster that focuses on fan favourites and a fighting model that retains most of the original mechanics, with the exception of the series' signature plane-switching. Unlike most Neo Geo Pocket Fighters, this doesn't offer any extra modes, and as one of the system's earlier games the quality of the background art can occasionally dip below expectations. It's still a game that you can have fun with, but it's hard to recommend over either the original arcade game or any of its handheld contemporaries.

» Score **68%**

Bubble Bobble 4 Friends: The Baron Is Back!

» **System:** PS4 (Tested), Switch
» **Buy it from:** Online, retail » **Buy it for:** £34.99

If you've ever wanted more of Taito's arcade classic, you're in luck as this sticks very closely to the original formula. Up to four players can take part in local co-op play, with fifty stages split across five worlds to beat. Extra power-up skills can be acquired upon the completion of each world, such as lightning bubbles and bomb bubbles. Beating this won't take you long, but you'll then unlock a hard mode and the tricky Arcade Of The Future mode, which tasks you with beating 100 stages with no continues. The original *Bubble Bobble* has been thrown in too, so the package is more substantial than it initially looks, though maybe still a bit slight for the price. It's fun solo, but as the title suggests, better with friends.

» Score **80%**

Space Invaders Forever

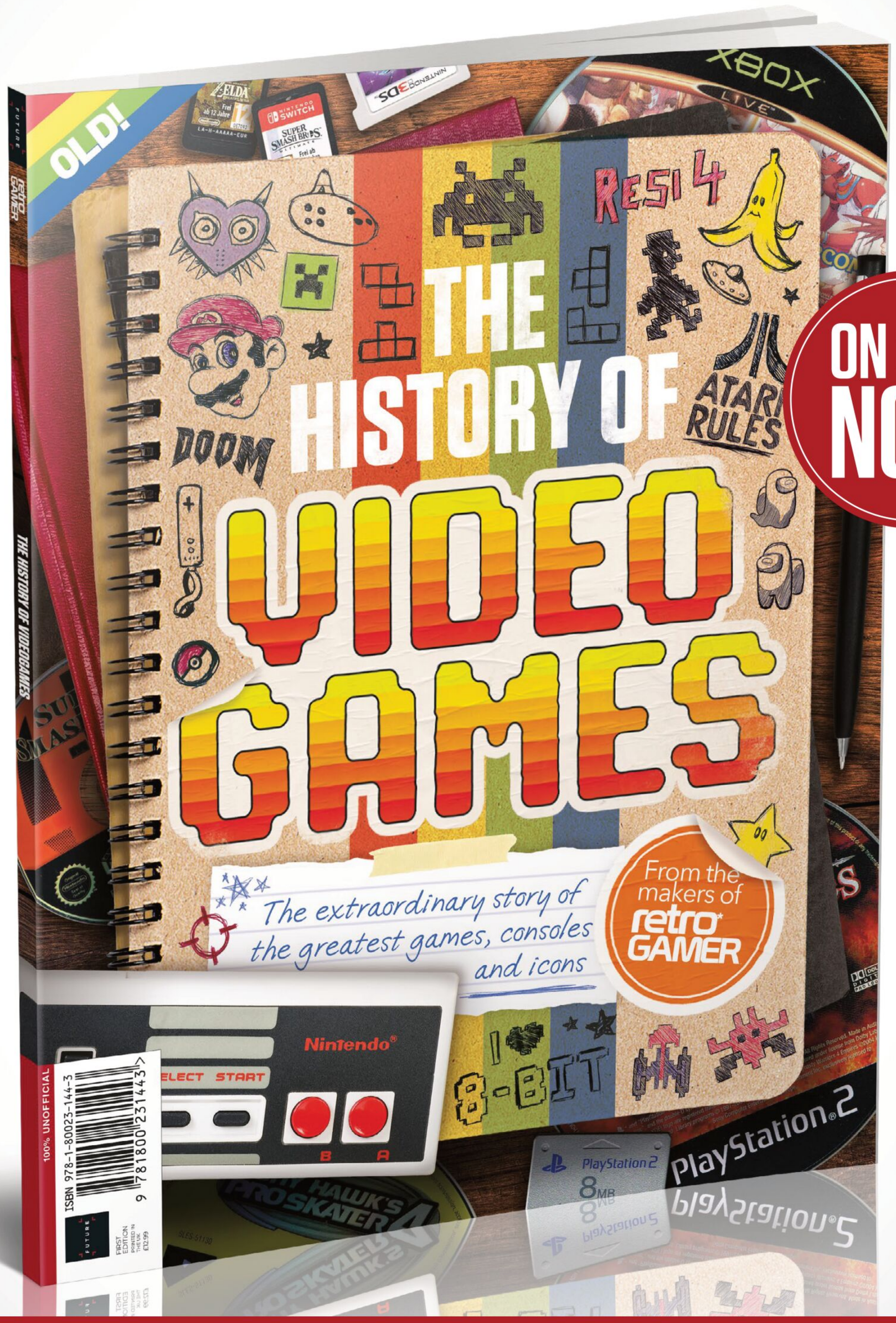
» **System:** Switch (tested) PS4
» **Buy it from:** Online, retail » **Buy it for:** £22.99+

Disappointing is perhaps the best way to sum up this three-game compilation from ININ Games. The highlight of the trio is easily *Space Invaders Extreme*, which remains just as energetic and exciting to play as it was in 2008 and proves that the venerable franchise has plenty of spark in it despite its advancing age. *Space Invaders Gigamax 4 SE* sounds impressive but the reality is a decent competitive multiplayer game that's boosted by an excellent soundtrack by Taito's 'house band' Zuntata. That brings us to *Arkanoid Vs Space Invaders*, an adaptation of the popular mobile game, which is fun, but won't hold your attention due to its repetitive nature. As great as *Space Invaders Extreme* is, the asking price still feels too high. One for hardcore fans only.

» Score **61%**

TAKE A JOURNEY THOUGH VIDEOGAMING HISTORY

From the formative experiments of the Sixties, through to modern gaming today, embark on a decade-by-decade voyage across videogaming's entire history. Explore defining titles, legendary developers, killer consoles and more!



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HOT TOPIC

RETROBATES MULL OVER THE SCENE'S MOST INTRIGUING ISSUES

GUILTY PLEASURES

The team has some confessions to make...

DARRAN JONES

NICK THORPE

TIM EMPEY

There's no such thing as perfect taste in games, and even if there was, nobody would have it. But there are definitely some titles that would, if seen on your shelf, at least raise an eyebrow from suitably informed visitors. So what shockers lurk in the collections of the **Retro Gamer** team?

DARRAN *Barbie Horse Adventures: Wild Horse Rescue* is the game that gets the most quizzical looks in my collection.

NICK Daz, you played *Barbie Horse Adventures* with your daughter, right?

DARRAN Yes that's right. We completed it together. Well I finished it because Emily would have been three or four and was utterly rubbish at it.

TIM *Gain Ground*.

NICK Interesting, that's one Sega always rereleases but nobody I've known before has ever really asked for it. What's the appeal with *Gain Ground*?

TIM I don't know. The other thing I don't know is how I got it. I just remember it appeared in my place one day and then playing it, and I think it was in Japanese. It was years later that I actually found out what its name was. But there was something great about all the characters you collect and their different abilities.

NICK Are there any common themes that run through the dodgy games you enjoy? For me, most of them tend to be interesting ideas done badly, or really off the wall things like you'd see in a lot of PS2 budget games.

NICK Or FMV games. I'm a sucker for those.

DARRAN I like *Tomcat Alley* and regret selling it. It's utter, utter tosh, but I used to love how it cut to FMV sequences that clearly featured Airfix model planes being blown up.

TIM I've not played many FMV games, I did like the scenes in *Command & Conquer*, but that's besides the point.

» [PS2] If you kill lots of things, like in *Gauntlet Legends* or the *Dynasty Warriors* games, Darran will be happy.

» [GameCube] Nick wanted to see all the endings, so he beat *Shadow The Hedgehog* 11 times. What a crazy masochist!

DARRAN To be fair FMV is a virtual paradise for poor games. It's like shooting fish a barrel.

NICK Oh yeah, the acting is usually as dodgy as the game design, but I'm a sucker for poor production values. Give me fluffed lines and awful dialogue and I'm in heaven.

TIM Isn't there one with Christopher Walken in it?

DARRAN Oh please, let there be one with Christopher Walken in it.

DARRAN What do you have to say Nickipedia?

NICK Yeah, Tim's thinking of *Ripper*.

TIM Ha!

TIM Good acting in a weird game.

DARRAN Clive Owen was in an FMV game, too.

TIM Blimey, Paul Giamatti is in it as well.

DARRAN How do people feel about the *Dynasty Warriors* games? For me they rarely move beyond a six or a seven, but I always enjoy playing them, even when they're downright monotonous. You can just switch your brain off and kill thousands of people. I have a real soft spot for the series.

NICK Oh yeah, *Dynasty Warriors* games get lots of flak but I wouldn't say I've ever played one and not had a good time.

TIM I played one of them a few years ago wondering how far they'd come since the first one I played. Not very as far as I could tell. And yep, Daz, it turned my brain off so much I fell asleep.

TIM Still, wouldn't mind having a go at the *Fist Of The North Star* spin-off one.

DARRAN To be fair, I think the *Dynasty Warriors* games work a bit like the *Lego* ones, in that if you like the attached tie-in/film you'll get far more out of it.

DARRAN I've just remembered *Gauntlet Legends*, another moderately reviewed game which I absolutely love. I clearly have a thing about killing things, which feels a little worrying.

TIM I actually had some fun with *Onechanbara: Bikini Samurai Squad*. It had a deep combat system if I remember correctly.

DARRAN It reminds me a little bit of *Lollipop Chainsaw*, the only

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» [Vita] *Senran Kagura: Bon Appetit* is surprisingly hard to get family friendly screenshots from, for a rhythm action cooking-themed game.

» [Mega Drive] It's slow going and he can't remember getting it, but Tim has a soft spot for of *Gain Ground.*

» [3DO] Nick owns more than one copy of *Night Trap.* Does anyone really need more than one?

» [Xbox 360] *Onechanbara: Bikini Samurai Squad* is very B-movie, but Tim enjoyed the combat system enough to stick with it.

» [PS2] *Barbie Horse Adventures: Wild Horse Rescue* is a decently constructed game, just one that's perhaps thematically unbearable to some.

game that's ever made me feel embarrassed to be a gamer.

NICK And that's saying something, given some of the Vita games you used to pick up.

TIM *Onechanbara* was way more tasteful than that, I think… Hmm, maybe not.

DARRAN Lol. Busted.

NICK I definitely once had someone gift me *Crypt Of The Necrodancer* in the hope that I would play *Senran Kagura: Bon Appetit* less.

TIM And did you?

NICK Erm, I have a platinum trophy on that particular Vita game so I guess the answer to that is no.

TIM Good grief, just watched a video of it. It'd make you go blind.

DARRAN Who said that? I can hear you, but can't see you!

READERS REACT

What tickles your guilty fancy?

Tom @ The Pixel Empire
Runabout 2, a straight-to-budget sequel to *Felony 11-79* from the latter days of the PlayStation. It looked rickety and the design was dated, but I ended up playing it for ages, for the fun of setting high scores. Smashing up beach furniture and art galleries never gets old!

Steve Westerman
On one of the first holidays we ever went on to Spain, there was an arcade in the lobby that me and my brother would just hammer pesetas into. It was called *Le Bagnard* and it was frankly bloody awful, but we had so much fun playing it…

PressPlayonTapeNL
I used to play *Rally Driver* on my C64 a lot. I don't know what it is with this game. It's slow, repetitive and not very pretty to look at. But at the time I could only afford cheap tapes (often made by Alternative Software) with homebrew games on them. And this kept me busy.

Graham Plowman
For me it was *Side Pocket* on the SNES. Janky as all hell aiming and 'physics' for the ball behaviours, but I just couldn't stop playing it. Damn hard with the trickshots as well during pre-internet days.

Fat Bot
Pac-Man 2: The New Adventures often gets a lot of derision but I think it's a really funny little point-and-click(ish) game. Making Pac-Man go into a head-exploding rage after you hit him with a slingshot for being smug never fails to make me laugh.

Ainsley Bowstead
Captain Planet on the Amiga 500 came bundled with the machine, some Amiga mags at the time gave it low scores, I always thought it looked and played pretty good (although it was very tough).

SmokedMeatsnFishes
Sewer Shark. A rail shooter where you navigate though sewers and have to pay attention to which direction to go or it's game over. But what really makes it for me is the over-the-top acting. Enjoyable in a *MST3K* kinda way and never fails to make me grin. Shoot the tubes, Dogmeat!

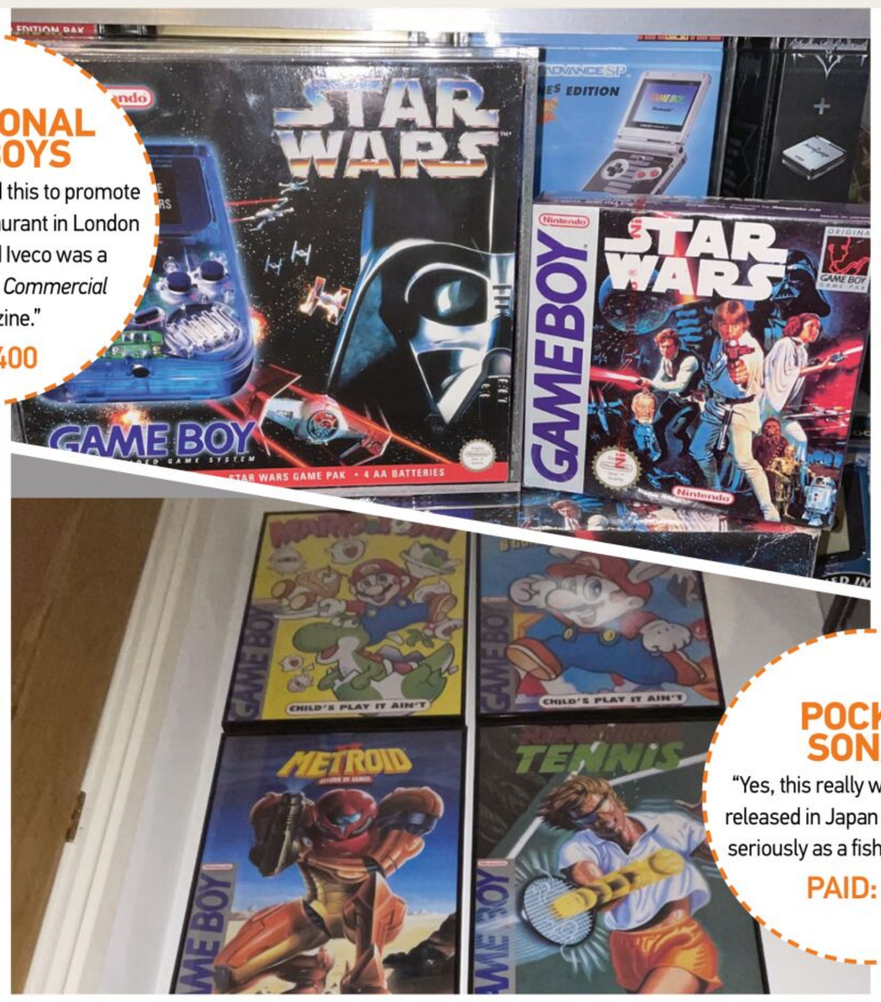
COLLECTOR'S CORNER

READERS TAKE US THROUGH **THE RETRO KEYHOLE**

PROMOTIONAL GAME BOYS

"Planet Hollywood used this to promote the opening of the restaurant in London in 1991, and the Ford Iveco was a competition prize in *Commercial Motor* magazine."

PAID: £400



POCKET SONAR

"Yes, this really works and was released in Japan only to be used seriously as a fishing aid device."

PAID: £90

BIO

NAME:
Gray Walton

LOCATION:
Peterborough, UK

FAVOURITE GAME:
Pokémon Yellow

FAVOURITE SYSTEM:
Game Boy, PlayStation, Virtual Boy

INSTAGRAM:
@GameBoyGray

SEALED FIORENTINA GAME BOY POCKET

"This was a commemorative console for the football team, I bought it from an Italian collector who unbelievably never opened it. Who am I to open it after 22 years of it being sealed?"

PAID: £1,100

GAME BOY GALLERY

A handheld collection to be proud of

If you've ever wanted to take a look at the various models of Game Boy that made it to production, there are few people who could give you a better overview than Gray Walton. While he doesn't limit himself strictly to the Game Boy line, Nintendo's portable phenomenon is definitely the focus of his collection, and he has amassed 143 boxed Game Boy games and 173 unique boxed Game Boy consoles.

Unsurprisingly, the handheld played a major role in Gray's gaming life, including his first gaming experience."That would be at four years old playing *Super Mario Land* on the Game Boy at a childminder's house," he remembers.

"Next came the *Star Wars* Game Boy games and a few years later *Pokémon*. This showed me games are much more than just playing them by yourself. They added the sociable element of having to network to collect them all and battle against your friends."

As time went by Gray grew and moved on, but then found himself bitten by the collecting bug. "I started around seven years ago and I think like most collectors I just wanted to buy back the games I had as a child for the nostalgia again, but then when you dig into retro game communities and you see what other collectors have it drives you further and further."

So what, apart from nostalgia, drives Gray to collect for the Game Boy? "For me it is such an iconic console and is always used in pop culture as the most memorable handheld gaming device. I haven't met anyone who doesn't enjoy playing a game of *Tetris* for example, no matter their gaming background," he replies. "After joining Game Boy collecting groups I met some great people I would now consider my best friends, and they cover all corners of the world from America, Europe and Australia. It's been much more than just collecting and playing games. Networking is such a big part of retro game collecting, you can't do it alone."

As well as games and consoles, Gray has acquired Game Boy paraphernalia including accessories, retail displays and more. "I was able to pick up an original Game Boy kiosk from another collector who agreed to trade it for my Game Boy Superbrite sign, meeting me half way of our 230 mile distance. A big part of it was finally meeting collectors like this that I talked to online." That's not such an arduous journey compared to the fairly extreme lengths he'd been to on a previous occasion. "My Game Boy shop retail cabinets were put up for sale by a German collector friend who was selling four of them. I was fortunate enough to have another friend who didn't hesitate when I suggested we need to hire a van and do the 1,000 mile round trip to pick them up. That was a very long but amazing 24 hours."

Gray's approach to collecting is relatively free-form, as he just enjoys the thrill of the hunt. "Fortunately it never stops. I haven't set myself any targets that I need to complete particular sets," he explains. "I just pick up what catches my eye and go from there." However, he's clearly interested in experiences as well as physical items. "Whilst I'll never get to meet Gunpei Yokoi who invented the Game Boy, I was fortunate enough earlier this year to meet NES inventor Masayuki Uemura who was kind enough to sign my console," he tells us.

What's evident is that Gray has a knack for discovering and picking up interesting stuff, so we'll be keeping an eye on his Instagram for more crazy finds in the near future. ✱

Got an impressive collection of your own? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

ZELDA: LINK'S AWAKENING DX (SIGNED BY SHIGERU MIYAMOTO):

"I bought this from a former MTV journalist in Germany who was fortunate enough to interview the man himself in 2002."

PAID: £300

JEWEL IN THE CROWN

SEALED GAME BOY

■ "I was fortunate to agree a good deal with the seller. It was pretty surreal that when I gave him my address he then revealed he only lived 30 doors down the street and is also quite a serious collector himself."

PAID: £900

BARGAIN HUNT

Your guide to the rising world of retro prices

THE COVER STAR

PLAYSTATION 2

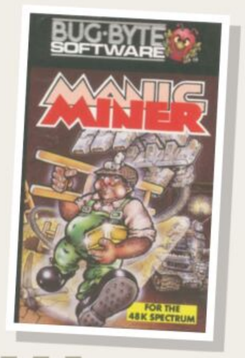
After a price spike earlier in the year, the console that conquered the world is back to more sensible realms. The original model in black or silver, with appropriate cables and controllers, should run you about **£20** loose or roughly **£30** boxed. The later slim model has been seen for as little as **£15,** with boxed models again going for around **£30.** There are plenty of bundles around with additional games and accessories if you want a ready-made collection, too.

THE LAST EXPRESS

There aren't many choices for editions here because this classic adventure didn't live up to commercial expectations, so those of you looking for a physical copy will want to grab a big box PC version for around **£20.** It's also available on a variety of digital platforms, designed to run on modern computers at a fraction of the price.

MANIC MINER

Matthew Smith's platformer can go for just **£3** on the ZX Spectrum, but the rarer 'whistler' cover variant will run you **£10** or more. Commodore 64 fans can also pick it up for around **£3,** Amstrad owners are a little luckier at **£2** and BBC Micro owners pay a slight premium at **£4.** With a little bit of patience, the MSX version should hit those prices soon enough too.



PROJECT ZERO TRILOGY

The most frightening thing about Tecmo's horror games may be the prices they attract. The original PS2 game often goes for **£10-20,** while the Xbox version typically ranges from **£5-30.** *Project Zero II: Crimson Butterfly* sells from £30 on PS2 and **£20** on Xbox, and the Wii remake starts from **£30.** The PS2 exclusive *Project Zero 3* starts at **£40.**

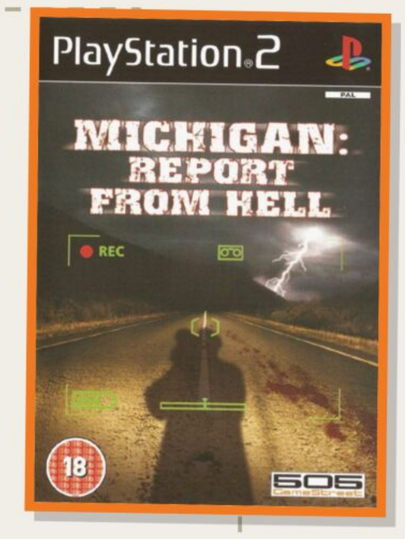
SUPER METROID

If you fancy experiencing Samus Aran's greatest 2D adventure after reading about Metroidvanias this issue, be prepared to pay a pretty penny. A complete big box version with the player's guide will run you at least **£100,** and even a loose cartridge goes for about **£25.** *Super Metroid* repros are now quite common, so be sure to check for authenticity.

HOW MUCH?!

MICHIGAN: REPORT FROM HELL

This unique PS2 horror game is one of the more sought after PAL games, as the game never received a North American release and its producer Suda51 has a cult following. The most common PAL release has Italian blurb and a PEGI rating, and sealed copies have recently sold for **£240, £226 and £104.** But if you get the UK cover art with the BBFC 18 rating and English text, it's worth more – one recent sealed copy went for a whopping **£800!**



Prices correct at time of print

MY RETRO LIFE

PERSONAL STORIES ABOUT OUR **SHARED PASSION**

NTSC FOR LIFE!

Darran explains why he doesn't have many PAL games in his collection

One thing I've learnt since professionally writing about retro gaming for the last 19 years is that collecting retro games is a deeply personal thing. There's no right way or wrong way to collect retro games, but there are plenty of ways to upset people who collect retro games. One of the easiest is to casually ask a collector why they pay so much money for inferior PAL versions of their favourite games, a faux pas I've certainly made in the past and now only use to tease friends who I know won't take offence.

This column certainly isn't intended to mock anyone that collects PAL retro games, but it should hopefully explain to readers why I typically tend to give older PAL games a wide berth. Part of any retro collection is typically triggered initially by nostalgia. Some of us use our collections not just to show off to others, but to also cling to our childhoods, to seek solace in the games we used to enjoy as kids, and to escape the trappings of our everyday lives and responsibilities. Our collections are our escapism, they typically consist of the games we grew up with, the games we owned, and for many European gamers that means PAL and that's perfectly fine. I discovered quite early though that PAL gaming wasn't really for me.

I actually embraced NTSC gaming at the relatively young age of 17. I was working full time at Gateway and I was obsessed with owning a Japanese Mega Drive which I had seen running at Denshams and the Video Game Centre. By the time I purchased my Mega Drive in December 1990, the system was already available in the UK, but its library was nowhere near as impressive as its overseas one.

Seeing those import Mega Drive games really opened my eyes, not just to the fact that the console was clearly a significant improvement over the Master System I had owned since 1988, but that games looked better and ran faster than the Mega Drive consoles that were on display in shops like Boots. I saved a bunch of cash, sold my Game Boy and collection of games to my mum so she could give it to my brother for Christmas (sorry Matt) and spent 400-odd quid on an import machine and copies of *Thunder Force III*, *Castle Of Illusion*, *Michael Jackson's Moonwalker* and some game called *Strider*.

I was intoxicated by my purchase and would put much of my weekly £65 wage towards buying new games (thank goodness the Video Game Centre sold second-hand games). That same year, many of my friends and relatives received Sega's console for Christmas and I could instantly see how much slower the games were running and how squashed the graphics looked, and like an absolute dick, I would point these differences out to them. After a while, I would just hang out with fellow importers, as it caused fewer arguments.

For me, NTSC gaming wasn't just about enjoying full-screen visuals and a higher running speed, it was also about playing things first, discovering games like *Magical Flying Hat Turbo Adventure* and generally feeling like I was in some exclusive club. The differences weren't just in the games themselves, but also in their lavish box art, which often looked significantly better than their western counterparts. The manuals were equally brilliant and always in full colour and were worlds apart from the dowdy manuals of PAL Mega Drive games. Everything just felt better.

I started off my NTSC journey with the Mega Drive, but it continued to many later consoles, including the SNES and Saturn. When 60Hz gaming became more commonplace during the PS2 era I finally started buying more PAL games, although there were still occasional hiccups. Seeing the Japanese version of *Devil May Cry* running on my cousin Martin's PS2 was enough to convince me to buy Sony's console there and then. When I finally purchased a PS2 a few months later the PAL port of Capcom's game was so atrociously bad I got my machine chipped so I could import a US copy instead.

I paid a lot more attention to release schedules after that, always picking up the US or Japanese equivalent for the relevant console if I found out that the PAL version was poorly optimised. For me, Japanese and US developed games are designed to run at these faster speeds and I always felt I was doing the developers a disservice if I was playing their titles in a way that didn't replicate that. That's not to say I didn't own PAL games, or couldn't get enjoyment from them, I just preferred owning the NTSC originals whenever I could.

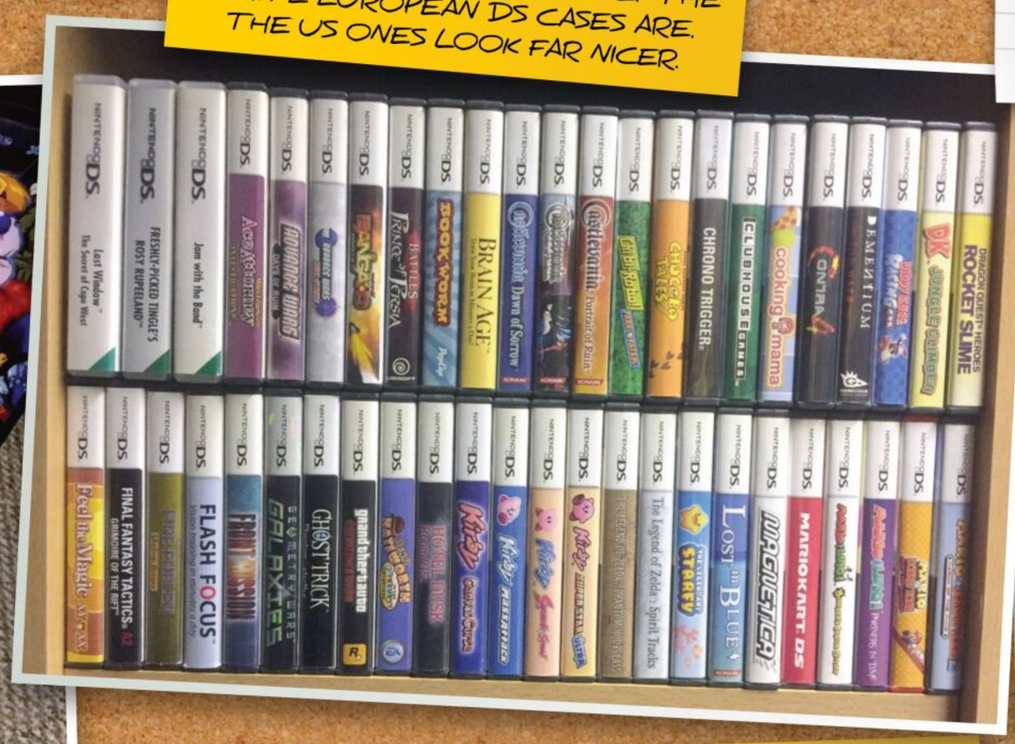
NTSC isn't always the answer though and just how overseas games are designed in a certain way, so too are European ones. As a result there are plenty of PAL games by European developers which remain superior to their NTSC versions, and even some Japanese developers began putting more effort into their western releases as time went on. Nowadays the scarcity of NTSC games and the high costs importing them means it's becoming harder and harder to build my NTSC collection, but that hasn't stopped me from continuing. I may be many years older now, with a lot less hair, but I still have the same fascination with NTSC games that I had when I was a 17-year-old kid. I guess some things never change. ✱

SCORE-003340
[MEGA DRIVE] I ENJOYED IMPORTING MAGICAL FLYING HAT TURBO ADVENTURE. DECAP ATTACK, THE PAL RESKIN, LOOKED NOWHERE NEAR AS NICE.
SEGA'S DREAMCAST WAS ONE OF THE FIRST CONSOLES TO AGGRESSIVELY PUSH 60HZ GAMING, SO OF COURSE I OWN ONE.
SCORE 00001240O
PLAYER
ENEMY

[SATURN] PAL SATURN OWNERS RECEIVED A ROUGH DEAL AS A HUGE NUMBER OF AMAZING GAMES LIKE HYPER DUEL NEVER APPEARED IN THE WEST.

[PLAYSTATION] COLIN MCRAE RALLY 2 IS A GREAT EXAMPLE OF A PAL RELEASE THAT'S VASTLY SUPERIOR TO ITS NTSC COUNTERPART.

THE GAMES RUN EXACTLY THE SAME, BUT I DISLIKE HOW UGLY THE WHITE EUROPEAN DS CASES ARE. THE US ONES LOOK FAR NICER.



PERSONAL HIGHLIGHTS

NTSC GAMES I CAN'T BE WITHOUT

THUNDER FORCE III
MY FAVOURITE GAME IN THE SERIES. SADLY WE NEVER RECEIVED A UK RELEASE.

STRIDER
I WILL FIGHT ANYONE THAT SAYS THE PAL MEGA DRIVE BOX ART LOOKS BETTER.

WAVE RACE 64
FAR, FAR SUPERIOR TO THE BORDERED AND SLOW PAL VERSION.

RADIANT SILVERGUN
AN INCREDIBLE TREASURE SHOOTER AND A JAPAN EXCLUSIVE.

CONTRA III: THE ALIEN WARS
NO ROBOTS, NO SLOWDOWN, NO BORDERS, NO PROBLEMS.

OSU! TATAKAE! OUENDAN
NOT NTSC OF COURSE, BUT THIS JAPANESE RHYTHM ACTION GAME IS MILES BETTER THAN ITS WESTERN COUNTERPART, ELITE BEAT AGENTS.

RETURN OF DOUBLE DRAGON
A LATER ENHANCED VERSION OF SUPER DOUBLE DRAGON.

JEANNE D'ARC
ANOTHER GREAT HANDHELD GAME THAT WE NEVER RECEIVED IN EUROPE.

JAPANESE MEGA DRIVE GAMES WERE INCREDIBLY EXCITING TO LOOK AT AS A YOUNGSTER. I STILL GET A THRILL NOW.

HERE'S A SELECTION OF MY WII GAMES THAT WERE NEVER RELEASED HERE.

I LOVED HOW COLOURFUL NTSC MEGA DRIVE MANUALS WERE.

[SNES] HERE'S A GOOD EXAMPLE OF THE SQUASHED VISUALS YOU'D OFTEN SEE IN POORLY OPTIMISED SNES GAMES.

MAILBAG

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

WIN!

Every month, one lucky writer-in will receive a spanking copy of either our NES/Master System or SNES/Mega Drive books

STAR LETTER

VIRTUALLY IMPOSSIBLE

Hi **Retro Gamer**,
After picking up a great PlayStation VR bundle deal on Black Friday, I've become convinced that virtual reality is finally ready for prime time. Unfortunately, it appears that I'm in the minority there – there aren't so many games available for it, and when I looked it up I was surprised to discover that less than 5% of PS4 owners have the headset. I can sort of understand why developers aren't making games for it, now.

That got me to thinking about add-ons of the past, and how they always seem to suffer from this 'chicken and egg' problem – the players won't arrive until the great games do, and the developers don't want to develop for something that limits their audience. Have any of them ever really hit the big time? If so, how did they do it? If anyone would know, I thought it would be you guys, so I've come to you for answers. Hopefully you can provide them.
Patrick Thompson

The most successful add-ons tend to be ones that can be easily bundled, either with a console or supporting software – and therefore, they tend to need to be cheap, like the EyeToy or *Guitar Hero* controllers. PlayStation VR is expensive and hard to demonstrate through advertising, so it makes sense that it isn't widely adopted, even with great games like *Resident Evil VII* available.

The biggest success story for an expensive peripheral has probably been the original Xbox 360 version of Kinect, which launched at £129.99 and sold ten million units over its first four months. By February 2013, 24 million units had been shipped. Of course, it's worth noting that most of them were bundled with consoles rather than bought separately, and even then, the majority of Xbox 360 owners still didn't have one.

» This promotional photo doesn't really convey the benefits of PlayStation VR, nor convince you that it's social.

» [NES] Ice hockey, then. Turns out you guys really, really want to see it – we'll get on the case.

ICE ICE CRAZY

Dear **Retro Gamer**,
I saw a letter from Yannick Labbé in issue 212 of your fine magazine and wanted to throw in my support for a feature on ice hockey games. At the very least, a feature on the Nineties EA hockey games would be fantastic. *NHL '94* is considered in some circles to be one of the greatest sports games of all time and its popularity exists to this day with online leagues. And while ice hockey may not be a major sport in the UK, it certainly has a history in this country. In fact, Sega sponsored my home team, Whitley Bay Warriors back in 2015 as a way to promote their game, *Eastside Hockey Manager* (a far cry from their Arsenal sponsorship in 1999-2000!). It's difficult to buy **Retro Gamer** here in Hong Kong, but the magazine is loved by locals involved in the retro scene over here!
David McGregor

Hi David, thanks for picking up the mag despite the difficulties involved! We've had a few letters about ice hockey now, so that's something we'll try to work into our plans for 2021. Also, that's some impressive Sega trivia – we knew that Sega had winter sports sponsorship history going back to the 32X snowboarding team of the mid-Nineties, but we had no idea about the Warriors.

COMPILATION STATION

Dear **Retro Gamer**,
Firstly I'd like to say how much I enjoy your mag and look forward to getting my mag through the letterbox every month, keep up the great work.

I am a 40-year-old gamer and have owned nearly every console through the years, and started gaming on the Commodore 64 which I got for Christmas 1989 (thanks for the *Turrican* feature last issue, two of my favourite C64 games). I sold my SNES and N64 collections of boxed games a few years ago, and my PlayStation collection as well, and have been trying to get it back recently but with inflated prices and the conditions of eBay listings being inaccurate I feel I'm wasting my money and not getting anywhere fast.

I really liked what the last featured collector, Graham Packer, said about collecting for newer consoles as these will be worth money one day, and with so many great retro compilations and downloads around for PS4 and Switch I think he has a very good point and I'm taking that advice. Perhaps you could do a feature on the best compilations at reasonable prices.
Joe Grover

We're glad to hear you're enjoying the magazine, Joe. It's unfortunate that you've had those experiences in trying to rebuild your collection, and we can definitely understand why you'd prefer to steer clear of the second-hand market based on that. We usually try to highlight good compilations in our reviews each month, but a look at what's out there might well be worthwhile. Readers, what do you think?

» [PS4] Modern consoles have plenty of great compilations, from broad ones to highly specialised ones like *Street Fighter 30th Anniversary Collection*.

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» [Arcade] Atomiswave games like *Samurai Shodown VI* now run on Dreamcast, but there's some fiddling involved.

A NEW WAVE

Hi **Retro Gamer**,
I don't know if you've seen this lately, but the Dreamcast has just received a whole bunch of new games! Someone's managed to get the Atomiswave arcade games working perfectly on the console, and I've been having a great time playing *Metal Slug 6*, *The Rumble Fish* and *Dolphin Blue*. Is there any chance of an article about this in the future?
Adam Jarvis

We've definitely noticed these – there's no way that Dreamcast fanatic Nick wouldn't have done. They're certainly interesting though they aren't quite accessible to everyone, as they need optical drive emulators to run properly, and that's a topic that we haven't yet looked at in itself. As for the games themselves, a couple have come up in The Unconverted before but they could make a good fit for a Minority Report down the line.

SAY YES TO RTS

Dear **Retro Gamer**,
As a big real-time strategy fan, I just asked myself: how come the only new IP, indie, Nineties-style RTS I know of is *Tooth & Tail* (and *Grey Goo* which is of a bigger budget)? Why are there so few new IPs in the RTS genre other than revivals and re-polishings of series such as *Warcraft*, *Age Of Empires*, *Total War* and *Command & Conquer*?

I'd love to hear your thoughts and opinions on this or even an article on the genre.
Matteo Fossi

That's a really good question, and one we don't actually have an easy answer to. If we were to hazard a guess, it's likely that even the complexity of early RTS games like *Command & Conquer* would be hard to replicate with a small team, so relatively few of them end up attempting it. It's a shame, because we'd love to see more movement in the genre. As for a feature, we did do a Bluffer's Guide to the genre back in issue 126, but we can definitely look at something for the future.

DISCUSSED THIS MONTH

Astro City Mini

Darran and Nick have both bought Sega's latest mini console, and it has arrived just a little too late for inclusion in this issue. First impressions are positive, as the unit itself has a microswitched stick and buttons that make delightful clicking sounds, and the emulation is broadly good – but *Virtua Fighter* definitely has some performance issues including notable input lag. Still, Darran has been revisiting old favourite *Shinobi* and puzzle fiend Nick has dived into *Stack Columns*, and we've both found ourselves wishing that we'd splashed out for the lovely but really rather pricey USB arcade sticks.

Your say

Every month, Retro Gamer asks a question on social media and prints the best replies. This month we wanted to know…

What are your favourite memories of the PS2?

Jason
I got mine a couple of weeks after Christmas. The day I went back to school. Had no idea what to get from the launch lineup so got *NHL 2001*. Massive mistake. So took it back and got *ISS* which was a bit better. Looking back, I really wish I had *Smuggler's Run*. That was a great game.

Kath Rin
My brother and I walked in our little village from door to door to sell newspaper subscriptions so we could get a PS2. It was really hard but we did it! I still have the PS2 and I will never give it up for anything! This was the year after the release!

Kitters
I was working at Rage Software and we launched *Wild, Wild Racing*. I can remember taking it around to a certain magazine house to present with a Japanese PS2 console which they plugged in without the step down transformer in!

In Between The Panels
The first memory I have is mum asking me which PS2 and game I wanted for Christmas. Then a couple of weeks before Christmas Day I got back from school and saw the package. I was so excited that I opened it and started playing it straight away, about an hour later she caught me!

Jono McNeill
I remember getting mine for Christmas with *Harry Potter 2*, but my parents forgot a memory card so it was PC World on Boxing Day.

Steve R Jones
Winning a PS2 in uni cos a mate submitted a photo of me and my mate in drag on a Barcardi Breezer promo, and playing hours of *Jonah Lomu Rugby*.

Ana Lu
I'm still doing my PS2 memories as I still play the many good games (and others not so good) it had to offer us players. And it kinda doesn't get so warm and noisy as my PS4…

Iringahn
I'd say it was 2005 that we got a PS2, and the first one we got didn't work. My brother biked back and forth to the store as we went through three different used PS2s until we finally got one that worked – we played *Dragon Quest VIII* and had a great time, it was so worth it.

The SegaHolic
I preordered mine. You chose a retailer, placed a deposit then waited on Sony sending you a letter to confirm you had a console. I got mine in week two of launch, from Gameplay, with *Tekken Tag*, *Ridge Racer V*, and *FIFA 2001*. Was offered a grand outside the store for it, I said no.

retro GAMER

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ENDGAME

THE MASK

» What do you get when you take Jim Carrey's comedic acting, an icon of Nineties videogames and slap them together? No, not the surprisingly non-awful *Sonic The Hedgehog* movie, but *The Mask* for the SNES – a platformer that manages to capture the manic energy of the titular hero, at the very least. Let's head to the Coco Bongo at the end of the game to see this animation in action...

01

» Hey look, it's Cameron Diaz! Well, not actually Cameron Diaz of course, a sprite from a game. Honestly, we struggled to actually remember what her character was called and had to look it up. It's Tina Carlyle, as it goes...

02

» So our hero, with his green face and reality-bending abilities, decides to take her for a dance. Soon enough he's whipped her into a whirlwind of excitement – quite literally, as she's spinning fast enough to make your washing machine blush.

03

» Whoosh! And away she goes, thrown up into the air by green Jim Carrey. At this point, we wonder about the height of the roof in the Coco Bongo. Judge the force of the throw wrong and she'll splatter all over the ceiling.

04

» Has he done it? Has The Mask left poor Cameron Diaz stuck up there like a piece of carelessly discarded jam on toast? If he has, he doesn't seem to care much as he stands there yawning for comedic effect. Flipping heck, man! Can't you see you might have killed somebody?

05

» Oh no, there she is, safe in the arms of our yellow-suited hero. That's a lovely flourish before the proper end sequence – or at least it feels that way. Unfortunately, this is all the ending the game has, beyond the credits roll over a backdrop of concept sketches. How times have changed.

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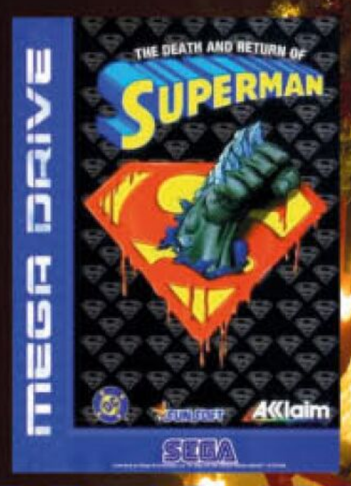

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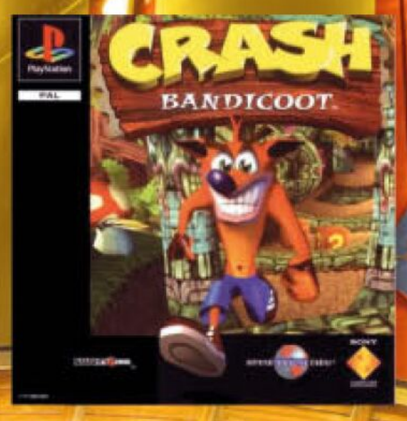

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